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School Board Journal

A PERIODICAL OF SCHOOL ADMINISTRATION

VOLUME 113, NUMBER 5 NOVEMBER, 1946

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The contents of this issue are listed in the "Education Index."

Member, Audit Bureau of Circulations and Associated Business Papers.

Business Looks to Education

The role of education in the social, economic, and industrial life of the nation is recognized again by the Chamber of Commerce of the United States. Strengthening of state departments of education is recommended in an education committee report, which the board authorized distributed to further the Chamber's policy of providing better education for youth. Thomas C. Boushall, committee chairman, said strengthening of state education departments is necessary to:

1. Assist the many small urban and rural communities with their educational problems.

2. Act as a bulwark against federal domination of education.

The report points out that there are 23,500,000 youth attending elementary and secondary schools this fall, of whom about half are in rural and small urban schools. Mr. Boushall reported:

"It is our belief that the Chamber of Commerce of the United States desires that direction and assistance for education be provided at the state level.

"Many state departments are undermanned, incompetently staffed, and not authorized to provide services needed.

"The Federal Government in implementing national educational legislation has by-passed weak, ineffectual state departments and worked direct with local communities.

"Only strong state departments of education can control federal attempts to intervene."

The report said "businessmen everywhere should understand the problems that face the public schools so that they may contribute to the improvement and to the increasing stability of our economic order." Postwar demands on education, it noted, again are forcing the expansion of state departments, particularly to meet the needs of veterans.

* * * *

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THE AMERICAN
School Board Journal

Volume 113, No. 5 NOVEMBER, 1946 Subscription, $3.00 the Year

A Ten-Point Guidance and Counseling Program in the Indianapolis Public High Schools

A. J. Kettler[1]

A co-ordinated ten-point program of guidance and counseling, applicable to the seven Indianapolis public high schools, was completed late last spring by a committee of counseling representatives[2] under direction of H. L. Harshman, assistant superintendent in charge of extended School Services, and J. Fred Murphy, director of counseling for the Indianapolis schools.

Subcommittee reports were compiled after nearly a year's intensive investigation and study of each of the ten points which were formulated in October, 1945.

Until the adoption of the new program this year, each of the seven schools had carried out its guidance functions according to the program developed in the individual school. The effort to co-ordinate the program marks the first such attempt, Mr. Harshman and Mr. Murphy believe, made in any large system in the nation. Under the co-ordinated plan the individual schools will adhere to the various phases of the program as local conditions permit.

The ten points enunciated by the general committee a year ago are as follows:

1. Adequate and usable cumulative records for all pupils, sufficiently reliable to insure complete and valid diagnoses.
2. Appropriate group and individual testing program.
3. Planned counseling program in which pupils are aided by both teachers and parents.
4. Group and individual guidance and counseling through classroom teachers, class advisers, sponsor-room teachers, and other guidance agents.
5. Satisfactory articulation between eighth and ninth grades, high school and college, and high school and gainful employment.
6. Complete orientation program for all pupils new to the school.
7. In-service teacher training.
8. Co-ordination of school guidance and counseling services with related community agencies and organizations having counseling functions.
9. Placement service available to present and former pupils.
10. "Follow up" and special studies.

Each of the foregoing phases was the subject of close scrutiny by a subcommittee which developed the salient points and made whatever recommendations seemed pertinent.

A breakdown of the "findings" and suggestions made by each of the ten groups follows:

I. Cumulative Records

Cumulative records should be more inclusive, Subcommittee I suggested, than those most schools now keep. Data should include the following items: Guidance care for elementary and junior high school grades; nativity record (family history); school marks and credits (by subjects); certain test results; personality ratings; special personnel problems; in-and-out-of-school activities; awards; work experience; attendance; health information; transcript records; entry and withdrawal, re-entry, and graduation data; and scholarship honors. The committee recommended that centralized records should be available. At present, each school keeps its own records.

II. Testing Needed

A co-ordinated testing program for all schools was suggested. Such a program would include reading ability testing in the ninth grade; intelligence tests in the ninth grade; aptitude, vocational interest, and preference tests in the tenth grade; and standardized achievement tests in the eleventh grade. The committee recommended (1) that the Stanford achievement test A-1 be given early in the eighth grade in order to make scores available to high schools before the beginning of the pupils' 9B semester; (2) that results of all tests be easily accessible; that city-wide norms be determined from percentile ratings on tests given to 9B's; and that recognition be given to the value of a profile based on test results of each pupil. The committee further urged preparation of a profile which might be used in each of the seven high schools.

III. Areas of Counseling

A planned counseling program, Committee III determined, should function in cultural, economic, educational, health, personal, social-civic-ethical, and vocational areas through wide utilization of both curricular and cocurricular activities and the services of the entire staff, the members of which should be assigned on the basis of position and individual qualifications. Counsel should be available to

[1]Public Schools, Indianapolis Ind.

[2]Representing the various high schools in developing the project were Mrs. Myrtle M. Johnson, dean of girls, Miss Gretchen Mueller and Audie Watkins, George Washington; Miss Winifred West, guidance counselor, Broad Ripple; Leslie B. Maxwell, director of counseling, Miss Dorothy Ellis, dean of girls, and W. Finley Wright, all of Manual; Clarence R. Clayton, vice-principal, Thomas Carr Howe; Claude M. Keesling, chairman of guidance committee and Miss Ruth Lewman, Shortridge; H. Harold Walter, director of counseling, Arsenal Technical; and Julian D. Coleman, vice-principal, George E. White, director of counseling, and Marimon Hansberry, all of Crispus Attucks.

parents concerning their children in educational and vocational plans, school achievements, personal adjustments with the group, with the school, and to individual problems. Through such planned program pupils' growth and development should be enhanced. It should assist them in making appropriate educational and vocational plans, to better understand their potential strengths and weaknesses, and to make wise decisions with respect to health habits, work experience, cocurricular participation, and subject achievement.

IV. Functions of Counselors

Provision for group and individual guidance and counseling, according to Subcommittee IV, would utilize the classroom teacher, class adviser, home-room sponsor, administrators, coaches, librarians, and other aides.

The committee delineated the area in which each of the afore-mentioned might serve. The class teachers' functions would be to develop principles of effective study, orient pupils as to the educational background for various vocations, and character guidance through teacher and pupil ratings. Class advisers, in schools having such system, would keep cumulative records, make program adjustments, co-operate in solution of attendance problems, counsel with accelerated and retarded pupils, etc. The sponsor room teacher in such schools would assist in the orientation program, offer college and vocational guidance, plan pupil programs, aid in character guidance, and adjustments for exceptional pupils.

V. Better Articulation

In order to improve eighth- and ninth-grade articulation (Indianapolis has the 6-3-3 plan in an 8-4 setup), high school counselors should have available at an early date all elementary school data on entering freshman, health records, test scores, and anecdotal information attached to a guidance card. A close relationship between high school and eighth-grade guidance personnel should be continued with common direction and in-service training. Through such relationship a more uniform plan of pupil appraisal and standards of making 9B programs could be established.

Pupils should be encouraged from their first entrance to high school to take subjects leading to minimum college entrance requirements. More needs to be done in this area by helping pupils to understand themselves and to properly evaluate their own abilities and capacities.

In successful articulation between high school and gainful occupation, the former should recognize a definite responsibility in vocational guidance. A planned program of securing and disseminating vocational information should be standard practice. Finally, pupils should be aided in selecting and entering gainful employment and in acquiring knowledge of available educational opportunities for growth and development while employed.

To aid in achieving these objectives, the high school should welcome opportunities to co-operate with community agencies and organizations which can contribute effectively to the co-ordination and articulation process between school and work.

VI. Orienting Students

An orientation program for 9B's should include welcoming exercises very early in the new semester. Some provision for student guides and for furnishing student information should be standard practice. Other factors of the well-planned program might include special 9B convocations, meetings with parents of 9B's, 9B talent programs, and distribution of printed or other expository information relative to the curricular and cocurricular offerings. Almost identical elements of an orientation program for newcomers may be expected to result in easier adjustment for such pupils to their new school program.

VII. Teacher Training in Counseling

Committee VII developed the philosophy of in-service training for teachers associated with the counseling program.

Salient features of this philosophy include a semester's apprenticeship for new counselors under an experienced sponsor, indoctrination of the entire faculty with the adopted guidance principles, professional preparation for counseling services; participation in conferences and keeping abreast of significant literature in the counseling-guidance field.

VIII. Community Co-ordination

The provision for a co-ordinated program of services rendered by the school and by related community agencies which may manifest a counseling function is an effort at control over the number and variety of services that each may render. It also serves to gather from both sources information that will be mutually helpful. Types of such services are fairly obvious to the reader's own experience. However, the committee recommended that community agencies and organizations with which the schools co-operate in guidance and counseling work be fully approved by the administrative staff, that all such situations be well planned and supervised, that both preguidance and postguidance functions be employed, and that each school determine the extent of participation advisable for its pupils.

The schools are co-operating actively in promoting school bond sales both as a patriotic duty and as a means of teaching thrift.

IX. Placement and Follow-up

Basic needs for an effective placement service, whether for college or employment, includes qualified and unbiased staff members to assist in developing a continuous and co-ordinated program of guidance related to each, Committee IX stated.

In the college guidance area, up-to-the-minute information relating to the institutions of higher learning is essential. Of no less importance is equally up-to-the-minute scholarship information. The school should be under obligation to furnish objective data concerning its graduates to special schools and to institutions of higher learning. The school should offer to assist in follow-up studies of former students to evaluate successes and failures in colleges or special schools.

In the placement area, besides a qualified staff member to administer the vocational guidance program, the basic needs include up-to-date files containing employer registration and student registration data; personnel forms, letters of introduction, and placement record cards. Here again the school should offer assistance in follow-up studies of successes and failures of students placed in gainful occupations.

X. Follow-up Studies

Finally the program provides for "follow-up" and special studies. The definition of "follow-up" relates to that element of the guidance program which involves continuous contact and counseling with high school graduates and nongraduates who are employed, who have entered college, or who have become homemakers.

The functions of an effective program, the committee determined, include the procuring, assembling, and recording of all pertinent information about students from school records, maintenance of contacts with former students, counseling where the need is indicated, encouragement of former students to make use of services offered by the "follow-up" program, conduct of surveys where necessity is indicated, and the recording and interpretation of pertinent statistical information secured to assist former students in successful adjustment to job, college, or homemaking.

Accreditation of Elementary Schools in 23 States

*Raymond H. Fletcher, Ph.D.**

Twenty-three states now exercise, and in years past other states have exercised certain control and leadership functions in regard to elementary education by means of standardization procedures. The requirements for accreditation which are placed upon schools are, in some cases, legally stipulated by the state board of education, the chief state school officer, or by the state department of public instruction. Thus, control and leadership activities are involved.

In collecting the information presented in this article, a letter was sent to the chief state school officer in each state asking that he send to the writer copies of the check lists used in the accreditation of the elementary schools in his state. A response was received from each state school officer or one of his assistants, and 23 state school executives indicated that an accreditation program was in operation. The 23 check lists were analyzed for the purpose of determining the requirements involved.

When a local school meets certain requirements it is given a rating of accreditment, that is, it is given a classification which indicates that the school is able to offer students certain educational opportunities. The requirements are stipulated on a check list or score card, and those items which are minimum requirements for all schools are indicated. The total score which is possible for a school to make if it meets all of the requirements varies in the several states from 100 to 1000 points. Various states had certain numbers of groups of standard schools. Mississippi, for example, was found to have five groups of standard schools — Class AA, A, BB, B, and C. One state, Alabama, has four groups; three states have three groups; four states had two groups; and the remaining 14 states have classified their schools either as accredited or nonaccredited. In addition to the major groups of classified schools, there are certain states which used subgroup classifications. North Carolina was found to have accredited schools as Group I or II schools, using the length of the school term as a basis of classification. Schools in each of these major classifications were then classified as Class A or Class B with the maximum number of pupils in average daily attendance per teacher as the basis. Only three states have used subgroup classifications. In most cases the score made on the check determines the classification of the schools.

*Highland Park Schools, Dallas, Tex.

These groupings are different from those found by Hill[1] a decade ago. In an analysis of practices followed in 13 states, he found that two states had four groups, two states had three groups, five states had two groups, and the remaining four states had only one group of accredited schools. There were five of the 13 states which had from two to six subgroups of classified schools.

A summary of the requirements found in the check lists and the states involved are shown in the table. These items, for the most part, represent minimum standards of attainment and have been employed to improve the schools, to encourage progress through state aid, and to encourage the establishment of larger school units.[2]

The objective of improvement is most frequently mentioned in the purposes stated on the check lists. Florida officials state that "This school list of standards is actually an appeal to teachers to find out about and see what they really need; to join with school officials and taxpayers in the scientific analyzing and planning and obtaining of those educational facilities and practices that are most needed for the improvement of Young America."[3]

The majority of the 23 states which accredit elementary schools include only the rural schools in the program of standardization. The elementary schools in urban districts are either included in the high school accreditation program or they are entirely omitted from this phase of the state supervisory program.

Although little unanimity is found in the specific requirements established by the several states, there are certain apparent aspects of the school program about which the requirements are found to be centered, namely, administration, curriculum, equipment, evaluation, instructional practices, organization, personnel qualifications, pupils, and school plant.

Items pertaining to administration are found to involve child accounting, general administration, percentage of attendance, public relations, salaries and tenure, school boards, supervision, and transportation. Curricular items consist of 39 subjects of instruction, inquiries about the use of the state course of study, and a check on whether or not local schools were meeting the legal requirements pertaining to the curriculum. Requirements pertaining to equipment which local schools should possess are grouped around audio-visual aids, classroom supplies, creative arts, language arts, library, miscellaneous, office, recreative arts, science, social studies, special classroom and laboratory, and the teacher's personal equipment.

Evaluation procedures, as outlined in the check lists, are found to be limited, in most cases, to suitable standardized tests. Certain states such as Tennessee, however, are found to encourage co-operative evaluation in which both teachers and pupils should participate and which should include developmental growth in behavior and personality as well as in the skills.

Items in regard to instructional practices are descriptive of the modern conception of good teaching procedures. Such terms should be considered as more helpful guides to teachers than as measuring devices for instructional practices.

Requirements pertaining to organization are found to be concerned with general organization, length of school term, maximum grades per teacher, maximum teacher load, minimum teacher load, and the number of teachers' meetings per month.

Personnel qualifications are largely concerned with the principal and the teachers — their training, ethics, and personal attributes. Professional qualifications of teachers regard community mindedness, experience, health, professional growth, and professional training. Items pertaining to pupils in accredited elementary schools are centered around progress through the grades. The absence of items concerning pupils is quite noticeable in a large number of state check lists.

Requirements in regard to the school plant are found to be centered around the buildings and rooms, custodial service, outbuildings, maintenance, and site.

Most of the items as shown to be required in the accreditation of elementary schools are further subdivided into more detailed, specific stipulations on the score cards in use in the several states. The audio-visual aids, for example, which a state desires its schools to possess are listed specifically on the check list. These include, to name some of the more frequently listed aids: phonograph and records, projection machine, radio, and stereopticon and slides.

As one might expect, the extent to which the specific items are named on the check

[1]Henry H. Hill, "How Thirteen States Standardize Their Elementary Schools," *The Nation's Schools*, 10:60–5, September, 1932.

[2]Henry J. Otto, *Elementary School Organization and Administration* (New York: D. Appleton-Century Company, 1944), p. 9.

[3]*Florida School Bulletin*, Volume IV, No. 2, "Florida School Standards," October, 1941, p. 4.

Summary of Requirements Involved in the Accreditation of Elementary Schools in 23 States

Requirement	*State*																								
	Alabama	*Arkansas*	*Florida*	*Georgia*	*Illinois*	*Indiana*	*Iowa*	*Kansas*	*Louisiana*	*Minnesota*	*Mississippi*	*Montana*	*Missouri*	*Nebraska*	*North Carolina*	*North Dakota*	*Oregon*	*Tennessee*	*Texas*	*Utah*	*Vermont*	*West Virginia*	*Wyoming*	Total
Administration																									
Child accounting	*		*	*	*	*			*	*	*			*	*	*	*	*	*			*		15
General administration	*	*	*		*	*	*	*	*	*	*	*	*		*	*	*	*	*	*		*		19
Percentage of attendance	*			*	*	*		*				*	*			*		*				*		10
Public relations	*		*	*	*	*	*	*			*	*	*	*			*	*	*		*	*	*	17
Salaries and tenure					*		*	*				*	*					*			*			8
School board		*			*		*	*		*	*	*							*					8
Supervision					*	*											*	*		*		*		6
Transportation						*											*			*				3
Curriculum																									
Legal aspects					*								*							*				3
Subjects	*		*	*	*	*	*	*		*		*	*	*				*	*	*		*		15
Use of state course of study						*		*		*		*		*	*	*	*	*		*		*		11
Equipment																									
Audio-visual aids	*	*	*	*	*		*			*	*	*	*	*	*		*	*	*		*	*	*	18
Classroom	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	21
Creative arts	*			*	*		*			*	*	*	*		*		*	*	*		*	*	*	15
Language arts	*				*		*			*	*		*	*	*						*		*	10
Library	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	22
Miscellaneous	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	22
Office										*					*									2
Recreative arts	*				*		*	*	*	*	*	*			*	*	*	*	*		*	*	*	16
Science	*						*			*								*						4
Social studies	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	21
Special classroom and laboratory		*								*	*				*									4
Teacher's equipment	*	*		*	*		*	*	*	*	*		*		*			*	*		*	*		15
Evaluation																									
Standardized tests						*				*	*		*	*	*				*					7
Instructional practices	*	*	*	*	*	*	*	*	*		*	*	*	*		*	*	*	*		*	*	*	20
Organization																									
General organization	*					*	*			*				*	*		*					*	*	9
Length of school term	*	*	*	*	*	*			*	*	*		*	*	*		*	*	*	*	*	*	*	19
Maximum grades per teacher	*								*					*	*									4
Maximum teacher load (pupils)	*		*	*		*			*	*	*				*									8
Minimum teacher load (pupils)	*					*					*						*							4
Teacher meetings per month	*		*	*		*																		4
Personnel qualifications																									
Principal	*		*	*	*		*		*	*			*					*				*		10
Teacher	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	22
Pupils																									
Activities					*							*					*	*				*	*	6
Attitudes							*					*	*				*				*		*	6
Load					*					*														2
Promotion					*					*											*	*		4
School plant																									
Buildings and rooms	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	23
Custodial service					*	*					*			*			*				*	*		7
Outbuildings			*							*	*			*				*				*	*	7
Maintenance			*		*	*						*							*		*	*		7
Site	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	21
Total	26	14	19	19	29	18	22	17	16	28	24	21	22	20	22	13	23	25	21	11	20	27	18		

lists vary between the states. There are listed in the several check lists 35 items pertaining to instructional practices. Any given state would be found to include from one to thirteen of these items in its score card. It may be concluded from an examination of the check lists that little effort has been made to make the lists complete in pointing out for school people all of the desirable aspects concerning an elementary school. The check lists are, instead, more nearly aimed at minimum expectations. Some of the more recently revised score cards are commendable due to the fact that they are more completely aimed at the whole school program and that they are a means of stimulating progress. The *Handbook for Self-Appraisal and Improvement of Elementary Schools,* which was developed in Texas, is the outstanding vehicle for improvement "through continued critical self-appraisal and revision of current practices."[4] Five "levels" of practices in the elementary schools are presented on various phases of the educational program. Level I contains the minimum legal requirements or the minimum of acceptable practices; Level V includes features and practices drawn from the frontier of thought and research in elementary education. The differences from one level to another present logical "next steps" in school improvement.

The lists which are aimed above the minimum program and point out goals to be achieved and practices which may be followed over and above the least acceptable standards present a positive approach toward helping teachers improve their schools. The fact remains also that the larger majority of the items are quantitative rather than qualitative.

[4] *Handbook for Self Appraisal and Improvement of Elementary Schools,* Bulletin No. 458, State Department of Education, 1945.

The School Board's Duty —

Extracurricular Finances—Their Stewardship and Control

Raymond D. Meade *

The rapid expansion of all phases of extracurricular activities, particularly at the high school level, has introduced new problems into school administration which should challenge the attention and best thought of administrators and school board members.

Problems Defined

Many of the activities, which now attract the interest and enlist the support of student bodies and citizens, "grew up like Topsy" — uninspired and unguided; at the best merely tolerated, frequently ignored, and sometimes even opposed by school authorities — each developing in its own way out of a felt need by the students themselves. The natural consequence was that each organization raised, handled, and spent its funds in any way it pleased. As one writer in school administration so aptly and succinctly describes the situation: "The result was financial chaos, slipshod methods of raising funds; numerous and scattered accounts; careless and unbusinesslike methods of bookkeeping and banking; squandered, lost, or misappropriated funds; unauthorized and unsupervised purchases; unpaid bills and unaccountable deficits; orgies of spending surpluses; duplication of functions and activities; and senseless jealousies and conflicts between organizations."

It is doubtful if all or any appreciable number of the foregoing problems have arisen in any one school. However, it is very probable that most school boards have been confronted at one time or another with these or similar problems. Sometimes maladministration of funds by a student officer, or suspicion on the part of the public that the principal or coach is pocketing gate receipts creates a situation which necessitates an investigation by the board. Unfortunately, by the time a case has progressed to this point, board action usually consists of "locking the barn after the horse is stolen." Irreparable damage results. Regardless of the guilt or the innocence of the individual under attack, the public is aroused and community confidence in the school is shaken. In such instances, respect for the school board engendered by years of hard work and conscientious service is lost overnight.

A fact frequently overlooked by student groups, sponsors, administrators, and board members themselves is that funds gathered by various school activities are semipublic in character. In the final analysis, the school board cannot evade a certain measure of responsibility for the proper stewardship and administrative control of such funds. Although the statutes of most states do not specifically define a board's responsibilities with respect to extracurricular funds, it may be safely presumed that the "general welfare" clause usually found in commonwealth school law not only gives a board the necessary quasi-legal authority but imposes a moral obligation to establish rules and procedures for the stewardship and control of such funds.

Objectives of Control

Writers in the field of school administration are generally agreed that an acceptable plan does not necessitate direct control by the board itself but that effective stewardship does require that board members be cognizant of their collective responsibility in such matters. The consensus is that the board should limit itself to the formulation of policies, delegating appropriate authority to the superintendent to set up desirable routines and then holding him responsible for their efficient supervision. When this has been done, a board may feel that it has fulfilled its stewardship obligation, provided that periodic reports of receipts, disbursements, and organization balances are made to the board by the superintendent, and that all accounts are given a thorough annual audit by a qualified person, preferably a certified public accountant.

In addition to the stewardship aspect, there are at least two other objectives, relative to the administration of extracurricular funds, which warrant the attention of board members. It is axiomatic that financial control of activities represents, as in any other line of business, the most effective means of guiding their development. Wise financial regulation by a school board, acting upon the recommendation of its administrative officer, promotes a natural, steady, and healthy growth of activities, proper correlation, and constructive supervision. Regulation also helps to guarantee a permanency of ideals, policies, and practices which are little affected by changes in organization membership, or in student, faculty, or administrative leadership. Lack of regulation may and often does engender many of the problems previously described.

The procedures involved in financial administration also have value as training techniques. Ultimately all students will manage their own finances. Sooner or later some of these individuals will hold positions of trust in which they will be required to handle other people's money. Wisely designed and intelligently supervised, the numerous and varied responsibilities involved in the financial administration of school activities will inculcate proper ideals and provide considerable actual practice in approved business methods. No school board can afford to overlook the importance of these phases of an extracurricular activity program.

Types of Control

There are two well-defined types of financial administration of school activities — the centralized and the decentralized. The decentralized type is usually characterized by sponsor-control as contrasted with administrator-control in the centralized type. In the decentralized type, sponsors, acting in accordance with more or less general policies concerning bookkeeping methods, accounts, reports, audits, and disposition of surpluses, are empowered either by tradition or by a *laissez faire* attitude on the part of a board to administer organization funds as they see fit. Frequently the decentralized method is preferred by aggressive sponsors who are impatient with procedures that smack of "red tape" and administrative interference. The fact that such persons appear to resent supervision is probably good evidence that greater control is necessary if the school is to have a correlated, integrated program of activities. Too often the "tail," as represented by extracurricular activities, "wags the dog" in a school. Regulation of extracurricular activities by the administrator is as essential to a well-balanced school as administrative supervision and direction is desirable for any other part of the school program. To allow a popular coach, a bandmaster, a dramatic director, or a class sponsor to administer organization funds in an independent manner is to invite fundamental disagreements which ultimately will bring repercussions and embarrassment not only to such a person and to the administrator, but to the school board as well.

Many school boards innocently make a fundamental mistake when they expect or allow groups of citizens such as band boosters, sports fans, and similar parental or civic groups to assume responsibility for raising the major portion of the funds necessary for the proper support of the activities in which these friends of the school have a special interest. Obviously, when such groups develop considerable *esprit* and enthusiasm in raising money, it is natural to expect that they will also want to have a hand in spending it as they see fit. They make sure that the particular activity in which they are interested suc-

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ceeds even if it thereby receives attention out of proportion to its importance in the program of the school as a whole.

Altogether too often, this means that an activity director, such as a bandmaster or a coach, soon begins to look to the well-intentioned, but nevertheless extralegal, vested-interest group for guidance and progressively becomes less and less responsive to the wishes of the school administrator who, presumably, is carrying out board policies. Unfortunately, it is quite likely that sooner or later sharp differences will arise and then the board discovers that, even though both may be in good faith, the superintendent and the activity director are working at cross purposes. Obviously, this is not a wholesome situation.

The School Authorities Must Control

Any administrator who dares to oppose the wishes of a strongly entrenched, vested-interest group is borrowing trouble not only for himself, but for the school board as well. And yet, no self-respecting administrator can afford to compromise himself professionally by allowing the program of the school to get out of balance without taking a stand in the matter. Sometimes a vested-interest group becomes so influential in the community that it dictates school policy in other respects and becomes a more important factor in administering the school than the board itself. No wonder, then, that in such situations the "tail" may be said to "wag the dog." What should a school board's position be when such a situation develops?

Educational authorities agree that no school board has a moral or legal right to surrender any portion of its responsibility for administering a school. If tacit approval or encouragement is given parental or civic groups to raise money in the school's name and to expend these funds without board supervision and control, it may be said that the board has thereby surrendered a certain measure of legal responsibility. This is not always as easy to regain as it is to surrender. It is the board's responsibility to administer the whole school, not just the academic part of it, regardless of public opinion in the matter. Extracurricular activities are as much a part of a school as any other phase of the educational program, and should be so regarded by the board. It is the superintendent's business to administer the details of such activities under the board's direction. For a board to delegate direction and responsibility for any part of the school program to a parental or civic group — either willingly or against the board's better judgment — is to undermine the superintendent's leadership and to detract from the board's prestige. For an administrator to foster deliberately the organization of such a group in order to neutralize board control over his own actions is to engage in unethical practices, and for him to side-step responsibility for working out acceptable ways and means for providing adequate financial support to extracurricular activities is to admit professional incompetency.

A division in authority and responsibility creates problems which the school board ultimately will have to solve. Better, then, that a board realize its own obligations in connection with the financial support of extracurricular activities and establish appropriate policies before a situation arises which may take years to correct without disrupting unity in the school and community.

Centralized Control Recommended

In contrast, the centralized type of control fixes responsibility for the administration of extracurricular activities and the accountability of all funds. In this type of organization, all activity funds from whatever source are deposited in one general account under the supervision of a general treasurer who is responsible to the school board through established channels of authority in the school. Disbursements are made only upon properly approved requisitions by student officers and sponsors. Although responsible for activity funds, the general treasurer should not supplant organization treasurers. If this occurs, much of the educational value of the centralized system will be lost. Student treasurers should still function as collectors of dues and managers of such activities as ticket sales, and should be required to keep an accurate and detailed record of the sources and types of all revenue as well as itemized accounts, supported by vouchers, of all disbursements. A good rule is to require that all cash receipts, without exception, be deposited and that all disbursements, however small, be made by check. Thus, the financial records of an organization are complete in every detail and can be made available for inspection by interested persons. In effect, the general treasurer is a "business manager" of the activity program who makes certain that funds are properly safeguarded, that disbursement orders are in acceptable form and that administrative policies regarding procedures are enforced. The organization treasurer under this plan is essentially a collector and bookkeeper, not a custodian of funds, except for a very limited time.

The general treasurer should be an adult who is connected with the school in an official capacity. The particular person that should be designated as the general treasurer depends somewhat upon the size and type of the school, and the availability of suitable personnel. In a district where there is both a superintendent and a principal, this job may fall to the lot of the principal. In larger communities where the principal's time is taken up by other more important duties, a subordinate administrative officer or a commercial teacher may be chosen to act as a general treasurer. In any event, this person should have more than a passing knowledge of bookkeeping and should be responsible directly to the principal, who, in turn, should submit comprehensive reports to the superintendent.

Oversight of the administration of such funds is the responsibility of the person in immediate charge of a school — usually the principal — and he should be granted authority by the school board and superintendent commensurate with the responsibility assigned him. Anything less than commensurate authority leaves loopholes for evasion of responsibility, inconsistencies in administration, and "buck passing" between the principal and the superintendent.

Additional Safeguards Suggested

Practice varies widely but there are many who believe that the person having administrative control of funds should not also have actual custody of them, and that anyone having custody of funds should not also have the right to disburse them without the approval of the person in authority. Such a system calls for two signatures — the principal's and the general treasurer's. Thus responsibility and accountability, in the strict sense of the terms, are assigned to different persons; neither can authorize the disbursement of funds without the other's co-operation. In practice the general treasurer is the person who is accountable for funds, while the principal by the act of signing a disbursement order approves the purpose for which the expenditure is made and acknowledges his responsibility in the matter.

There are good practical reasons why extreme care should be taken in the type of individual chosen to act as the general treasurer in a system of centralized control. A high school principal, for example, who administers extracurricular finances on behalf of the school board, is wise if he delegates the custody of funds to a subordinate — preferably a mature, reliable teacher or an administrative assistant with a reputation for good business judgment — whose appointment has been approved by the school board. Principals who use young, inexperienced office girls for this purpose have little or no protection if personal malfeasance is alleged or irregularities of a financial nature are discovered. The public is inclined to overlook carelessness or peculation by a young person and to hold an administrator fully responsible, even though he may be innocent of wrongdoing and have no knowledge of his subordinate's careless or dishonest acts. Boards of education will do well to protect both themselves and their administrators by insisting that employees to whom the custody of funds are entrusted be bonded adults who have the public's full confidence.

Centralized Control Features

Summarized, a centralized system of financial control should include the following essential features:

1. A specially qualified and bonded adult member of the school staff to act as

The New Missouri State Board of Education

Vast improvement in the state's administrative help to local schools is expected from the activities of the new Missouri State Board of Education, created under the recently revised State Constitution. The Board, appointed by Governor Donnelly, held its organization meeting on September 12.

Reading from left to right: Mrs. Chapin S. Newhard, vice-president; Mrs. True Davis; Ollin Drennan; Everett Keith, president; Roy Scantlin, commissioner; John H. Flanigan, Jr.; James E. Nugent; Charles G. Ross; J. E. Mitchell.

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a general treasurer. This person's duties include custody of all funds collected by student treasurers and preparation of disbursement orders only upon proper authorization of organization officers and sponsors.

2. A single bank account for all organizations of the school, subject only to the joint order of the general treasurer and the principal.

3. Monthly statements rendered by the general treasurer to all organizations and to the principal which show the status of each account.

4. Periodic reports to the superintendent which show receipts, disbursements, and cash balance of all organizations; also, an annual audit of the general treasurer's books by a skilled person responsible directly to the school board.

5. A suitable system of organization accounting and routine of administration to which all student treasurers are trained to conform under the instruction and supervision of the general treasurer.

6. A student treasurer for each participating organization whose duties include the collection of funds, depositing them with the general treasurer, presenting properly signed requisitions when disbursements are desired, and keeping prescribed records.

The methods used by many school administrators in managing extracurricular finances are not always satisfactory to school board members. Most board members are inclined to view such matters impersonally and to expect an administrator to do likewise. It is relatively easy for an administrator to fall into habits and to develop practices over a period of years which are based on his implicit confidence in the integrity and ability of faculty members who handle funds rather than upon sound business principles. No board member wants to be placed in a position of seeming to question the honesty of either the administrator or any other trusted employee of the school district even though it may be rather obvious to the board and the community that proper safeguards and desirable controls have not been established. Consequently year after year passes and the personnel of the board changes without significant action taken to appraise current practices and to formulate clear-cut policies of stewardship and control on an impersonal and businesslike basis. Such a condition is not wholesome and does not make for harmonious relations between a board and its administrative officers. If the responsible administrator does not see fit to initiate periodic consideration of important matters pertaining to the many aspects of extracurricular finance, he should not be offended if members of the board request more complete information and suggest improved procedures.

On the other hand, school board members may individually or collectively exercise their legal prerogatives to such an extent that they literally tie an administrator's hands. No principal or superintendent can do his best work when hedged about by petty regulations or when excessive limitations have been placed upon his authority to administer affairs in keeping with commonly accepted business principles. He not only is handicapped in the performance of his routine duties, but he also "loses face" with his faculty and student body. Such a situation calls for frank discussion between the administrator and the board.

In the final analysis, the aims and objectives of proper stewardship and adequate control of extracurricular activities will be achieved only through mutual understanding and appreciation by administrators and board members of the many problems involved. Periodic appraisal of current practices, frank discussion of problems, and impersonal formulation of policies are necessary steps if extracurricular funds are to be administered intelligently and effectively in the best interests of the students of a school. Both board members and administrators are obligated to face all issues arising out of this phase of a school's program in as courageous and conscientious a manner as they would other more common and less vexatious problems.

A Teachers' Workshop Will Provide —

A Fall Tonic for Your Science Program

Charles W. Quaintance, Ph.D.[1]

To the thoughtful school administrator, science teaching in the elementary grades presents a problem which cannot be taken lightly. One wonders what technique will give satisfactory results in securing good science teaching. Various methods have been tried.

Theoretically, it may be possible to cull out teachers who are weak in science, but with the teacher shortage this is not a solution. Insisting on summer school preparation in science is good, providing teachers can afford to take the necessary time away from lucrative summer avocations, and providing further, that the summer school courses are professionalized and not "pure" science. State courses of study may stress experiencing as the keynote of science teaching in the grades, but this is no guarantee that teachers will follow such a procedure.

Departmentalizing science is another possible solution. However, it sets science apart from the body of the curriculum, instead of using it to motivate and enrich. Another plan is to secure as new teachers each year those well qualified to teach science.

Other solutions are open to the administrator and are tried, but one which gives effective results for the time and effort spent is the in-service science "workshop." In this plan, science consultants are called in from teacher-training institutions to study the needs of the community and schools with the teachers, and to guide the faculty in an intensive study of problems involved in science teaching and methods of attaining desirable educational goals.

The Experience of Parkrose

As an example of this approach, here is the community of Parkrose, a small city in Oregon. Its teachers realized they still need stimulus and help in meeting the requirements of effective science teaching. Consequently they requested an in-service study conference for last fall. This request was channeled through the In-Service Extension Division of the Oregon State System of Higher Education. Three science consultants were loaned by two of the colleges of education in the State System, to work at the primary, intermediate, and upper grade levels.

For the first day, the school remained in session. Consultants made a survey of physical resources of the community and visited the classrooms to determine the status of science teaching. This included a survey of available science equipment in the schools.

The succeeding day's school was dismissed in line with the state policy in Oregon which makes it possible to hold in-service workshops during regular weekdays, and still not forfeit the regular allotment of district school money. The teachers, administrative officers, and consultants met to consider the problems, and to do experiments geared to the grade school level.

Most of the first morning was spent in discussions led by consultants, and participated in actively by the teachers. Elementary school science was viewed as a broad area of learning comparable to that of social science. Major objectives of science teaching were analyzed, such as the development of science understandings, the provision of worthy use of leisure, etc. Teachers contributed a list of their practical problems met in the teaching of science. As topics were introduced, a mimeographed sheet pertaining to each was given out to each participant.

Help Given by Consultants

Finally, as a result of the community resource survey made the previous day by the visiting consultants, a mimeographed sheet on local resources was handed out to initiate a discussion on how these local resources could be used in the construction and teaching of science units, as well as in fusion units.

In the afternoon, selected experiments in a physical science unit were demonstrated, and plans were made for the preparation of units which were constructed the ensuing day. Since the problem of equipment proved to be a big one for the teachers, each unit was analyzed for necessary equipment. This equipment was listed as to possible source, that is whether by local purchase, from the children themselves, from the high school science room, or from scientific supply houses.

Also, on the next day, the visiting science consultants made certain recommendations which were discussed and voted upon by the faculty as a whole. Primary grade teachers planned and presented to a final general meeting selected experiments from physical science units for grades one, two, and three.

Many and varied were the questions and problems posed by teachers. Noteworthy among these was one question, "Should science be taught as part of fusion units?" It seemed to be generally agreed after discussion that just now in this school, it was better to teach science separately in order to insure the proper teaching of fundamental concepts. It was felt that until teachers acquire confidence in guiding children in science experiences, that attitudes, principles, and methods of science would suffer if taught chiefly as fusion units.

Nature Study as Science

Primary teachers especially were concerned about the teaching of nature. It was agreed that nature study is good science, if it goes beyond nature naming only, and as in any science unit, if it contributes significantly toward the major objectives of science.

The lack of a physical science background prompted a vote to investigate the possibility of an extension course in professionalized science, to be held in Portland. By now, teachers had a motivation for studying science.

One of the outstanding achievements of the in-service workshop resulted in the appointment of a faculty science consultant, the high school physics teacher, who will aid elementary teachers in choosing equipment and in doing some of the more difficult experiments.

A typical comment of teachers was this: "The workshop broke down some of the fear that keeps me from plunging into teaching science." The superintendent commented afterward: "For the first time they became aware of a job to be done."

Other school districts may find it desirable to arrange a workshop or conference similar to the example given here. To this end, several steps are suggested: First, have the idea worked out through a committee of teachers. Second, enlist the aid of the state department of education, the county supervisor, and superintendent. Perhaps invite them as visitors to the conference. Third, secure competent science consultants from your nearest teacher-training institution. Fourth, in co-operation with all agencies concerned, plan a practical program. Finally, follow up the workshop by requesting faculty members to give evaluations and criticism in writing. Pursue the area of science further in subsequent well-planned faculty meetings. And carry out the recommendations that develop from the workshop.

Such a procedure should result in a real "shot in the arm" for your ailing science program.

A good school is a good citizen with better living, more attractive homes, more enjoyment and profit from leisure hours for the citizens of the community. — *Dr. Herold C. Hunt,* Superintendent of Schools, Kansas City, Mo.

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Salary Plan vs. Salary Schedule

Mt. Lebanon Township, Pittsburgh Suburb, Develops Comprehensive Salary Plan as Project in Co-operative Administration

L. E. Perry, Ph.D.[1]

BACKGROUND

In colonial times the typical school system was a single one-teacher unit. The teacher "boarded around," and money as such played a small part in his thinking and his life. Even so, because of the character of the social and economic patterns of his time, he could maintain a place in society reasonably consistent with that of his constituents and consistent with the implications of his position in the community.

In more recent years, however, the pattern of living, even in rural areas, has become very much urbanized, and the teacher's ability to maintain an appropriate social and economic position in his community has become almost totally dependent upon his cash income from professional salary or other sources. Moreover, the tendency of school boards to think of teacher compensation in terms of hourly, weekly, or monthly wages for the time when school is actually in session has retarded the progress of teachers' salaries toward the goal of a reasonable and appropriate annual professional income for teaching services.

Prior to 1935 teachers' salaries in Mt. Lebanon were determined by the bargaining method still widely used throughout the country. In 1935 a single salary schedule of the preparation-experience automatic type was developed and unofficially put into effect as a guide for the fixing of teachers' salaries. In 1941 a similar schedule was officially adopted by the board of education. During the school year 1944–45 a committee of the local branch of the Pennsylvania State Education Association made an extensive study of the salary problem and submitted to the superintendent an amended schedule of similar type. In the fall of 1945 the superintendent asked a small but representative portion of this committee to work directly with him on the development of a comprehensive salary plan as distinguished from a salary schedule. After three months of intensive work the new plan was submitted to the teachers of the district in a series of meetings which provided for unlimited questions and discussion followed by a secret ballot vote. It was adopted by the board of education at its regular meeting in March, 1946.

PHILOSOPHY

It was the belief of the committee that the morale of any employment group, be they school employees or industrial workers, is influenced to a considerable extent by the nature of the implications of pay plans and procedures. Pay plans and the procedures by which they are administered create certain attitudes and incentives apart from direct compensation for services. If these attitudes and incentives are wholesome, constructive, and consistent with what the paying organization is trying to accomplish, wholesome and high morale tends to result. The converse is likewise true.

The question then arose as to what this school district wished to accomplish as by-products of its salary plan. Briefly they were believed to be the following:

1. To attract, not so much for immediate cash profits as on the basis of long-term career opportunity, the very best teacher-material available

2. To attract and hold, without discrimination on the basis of sex as such, a proper proportion of high-type, promising male teachers

3. To encourage Mt. Lebanon teachers to live in Mt. Lebanon through the influence of economic incentives rather than by arbitrary regulation

4. To minimize unequal duty loads by appropriate compensation for extraordinary amounts of extra duty or extra responsibility

5. To promote school democracy through teacher-administrator mutual confidence and co-operative effort

If these were the objectives which the district wished to accomplish as pay-procedure by-products, then the pay plan should be deliberately designed in such a way as to produce these desired results. Such was the blueprint on which the new salary plan was built. It consists of a base-pay schedule, a cost-of-living-allowance schedule, an extra-duty and responsibility-pay schedule, and an administrative-pay schedule.

LOCAL PROBLEMS

Having agreed upon a general philosophy, the teacher-administrator committee proceeded to attack specific problems in the light of that philosophy. Some of these problems were as follows:

1. Limitations of the Single Salary Schedule

Professional organizations and periodicals are now conducting far-reaching campaigns for single salary schedules for teachers. As an intermediate objective this constitutes a worthy target; as an ultimate goal, however, it will not be a satisfactory answer.

For ten years the Mt. Lebanon public schools have had a single salary schedule. Experience revealed that this device solved some problems, only to create others just as valid and just as persistent. It eliminated professional discrimination between elementary and secondary teachers, and between women and men teachers; it was highly gratifying to women teachers without family responsibilities, but became the basis of endless dissatisfaction to married men teachers. Thus the very device which abolished professional discrimination against unmarried women teachers created economic discrimination against men teachers with family responsibilities. How could this problem be solved without repudiating the principle of single salary schedule? The cost-of-living allowance feature was devised as the answer to this question.

2. Extra Pay for Extra Work

Educational administration theorists have correctly and consistently advocated the principle that the activity program of a school should rest evenly on the shoulders of the entire teaching force. They have argued with convincing logic that any plan of extra pay for athletic coaches or others directing extracurricular activities would promote a labor-union type of attitude among teachers toward the extra duty necessary to conduct the extraclassroom activity program of the school. Thus, say these theorists, no teacher could be called upon to perform any task outside of her routine classroom-curricular assignment unless there were a price tag attached to it.

The fallacy in the above theory lies in the fact that in practice it is actually not possible evenly to distribute the burden of the extraclassroom activity program over the entire teaching staff. In a small school there are likely to be more activities than there are teachers; in a large school the opposite is likely to be true. Moreover, differences in the interests, temperaments, and qualifications of teachers demand selective assignment to activity sponsorships if the program is to succeed. Furthermore, a school system operating on the basic principle of a single salary schedule must to a large extent balance the work if it is to equalize the pay of men and women, elementary and secondary teachers.

A compromise was therefore sought which would recognize the responsibility of all teachers to carry a reasonable share of the

[1]Superintendent of Schools, Mt. Lebanon, Pa.

extraclassroom activity load, but at the same time provide appropriate compensation for extraordinary amounts of extra duty or extra responsibility. For this purpose the extra-duty-and-responsibility (EDR)-pay feature was devised.

3. Teacher-Administrator Confidence

Salary secrecy is the extreme to which school people have tended to swing in their reaction against the public printing or posting of teacher rosters complete with salaries. Where salary secrecy is promoted as a professional virtue, the situation at its best reflects benevolent paternalism on the part of the superintendent in the administration of teachers' salaries. At its worst it suggests exploitive manipulation for reasons too dubious to elaborate here. Neither situation is conducive to the promotion of teacher-administrator mutual confidence.

Confidence is the fruit of a tree whose roots are frank and reliable information. To trace this tree to its roots, we pursue some such course as the following: Confidence is achieved through fair dealing; fairness is impossible without consistency; consistency is difficult without established patterns or policies; patterns and policies are mysteries unless known and understood by those affected; mysteries are breeders of suspicion and are, therefore, malignant tumors on the roots of the tree whose fruit is mutual confidence.

Based on this analysis of the problem of confidence, two solutions were devised. One was to put in writing and furnish to all teachers not only a copy of the various schedules involved in the salary plan, but also a statement of the philosophy on which each was based and the principles to be observed in its application and administration. There were to be no hidden card tricks in this game. The second device was provision for a permanent teacher salary committee, democratically elected and representative, which would be charged with the responsibility of recommending to the superintendent an equitable solution to all moot questions arising under the new plan. Emphasis was to be placed on the determination of the *true facts,* in order to give to the interests of both teachers and school district a maximum degree of protection.

4. Flexibility

It is a recognized economic axiom that professional salaries tend to lag behind either upward or downward changes in wage and price levels. The result is economic distress on the upswing of inflation and temporary advantage on the down curve of depression. So far as teachers' salaries are concerned, a major cause is the inflexible school board legislation on which such salaries are usually based.

The problem of flexibility, therefore, was how to achieve a greater degree of responsiveness to marked changes in price levels and cost of living without destroying the security which a stabilized salary program provides. This problem was solved by devising a base-pay schedule, which would in itself be a reasonable and desirable basis of professional compensation for teaching on a career basis. This schedule was drawn up on a dollar basis with all the stability and security of the conventional salary schedule. The supplementary pay features of the salary plan, however (cost-of-living allowance and extra-duty-and-responsibility pay), were set up in terms of units, the dollar value of which might be changed from year to year by school board action without the necessity of altering the structure of the plan itself. Thus in times of inflation, for instance, the value of the cost-of-living allowance unit could be increased in proportion to the rise in prices or to such degree as the board of education deemed advisable. Likewise in times of depression the value of this unit could be reduced to as little as one cent without necessary change in the actual structure of the plan. In the meantime, the base-pay schedule could remain unchanged.

5. Administrative-Job Pay

Any developer of a comprehensive pay plan for teachers will ultimately encounter the problem of salaries for administrative personnel, including perhaps even that of the superintendent himself. Should principals, assistant principals, and other administrative personnel be paid wholly or in part on the same basis as teachers where experience and professional qualifications are involved; or should they be treated as a separate privileged group immune from the requirements and limitations which affect teachers' salaries?

It is believed that administrative effectiveness is based on leadership rather than on the authority inherent in a position. Leadership, in turn, is based on respect, which is dependent on confidence, which has been anatomically analyzed above. A consciousness by teachers of common sharing with them by administrative personnel of certain uniform salary requirements and limitations would seem to be conducive to that sense of fairness which is productive of respect and confidence.

Based on this line of reasoning, the Mt. Lebanon salary plan provides that the base pay and cost-of-living allowances of administrative personnel be computed from the same schedules and in the same manner as for teachers. Thus their base and cost-of-living pay represent their professional compensation as teachers; their job pay as administrators is computed from a separate administrative extra-duty-and-responsibility-pay schedule. This schedule is set up in terms of units, the allocated number of which reflects differences in enrollment and degrees of work or responsibility. While the enrollment basis for such allocation may be challenged by some, it is doubtful that there is a more valid objective basis for differentiating between administrative positions of similar type, or a sounder basis on which to provide for growth in administrative job pay as the administrative jobs concerned grow in size or responsibility.

ADOPTION OF THE PLAN

Having devised what the committee believed to be a desirable, workable, and financially feasible salary plan, the next issue was to get it approved by the teaching body as a whole and adopted by the board of education.

From the beginning, the teachers had been assured that no plan would be submitted to the board of education for adoption until after the teaching group had had a chance to react to it. An uphill struggle for teacher approval, however, was created by preliminary reports, information leakage, and rumors to the effect that the committee was considering some kind of dependency scheme. Immediately all the old arguments against a double standard of pay for men and women were dusted off and used to fan the flame of professional indignation. The committee, however, continued steadfastly at its work, saying nothing till it was ready for a complete report of the finished plan.

The first favorable factor so far as the teachers were concerned was the genuinely representative character of the committee. The committee itself consisted of two elementary teachers, one junior high school teacher and one senior high school teacher. The president of the local branch of the state teachers' association and the superintendent served as *ex officio* members. An elementary teacher was the committee chairman. Within this group the following interests were represented: elementary classroom teachers, junior and senior high school classroom teachers, special teachers, married men, married women, unmarried women, athletic coaches, nonathletic extraduty assignments, and administrators.

As the plan developed, the superintendent counseled freely with the building principals and with various members of the board of education to test the ideas under consideration against administrative reaction, lay opinion, and business judgment.

When all was ready, a series of teachers' meetings was held by school buildings. These meetings were held in the evening in order to provide unlimited opportunity for presentation of the plan and for questions and discussion about it. These meetings were presided over by the committee chairman and each member of the committee took a carefully prepared and previously reviewed part. When all questions and comments had been cleared, mimeographed ballots were distributed and each feature of the plan was voted on separately. The marked ballots were put in a sealed envelope and turned over to the building principal to be held until

all meetings were completed. At the end of this series of meetings, a committee of tellers representing all buildings counted the ballots and reported the results to the superintendent and the salary committee. The final vote was approximately eleven to one in favor of the new plan.

As the representative character of the salary committee was a favorable factor in winning teacher support, so the caliber and composition of the board of education was a vital factor in its final adoption. The Mt. Lebanon schools are extremely fortunate in the board of directors under which they operate. The board is by design and by tradition strictly nonpolitical. It is composed of the very highest type of citizens, none of whom draws any compensation for his services. They are all parents, all genuinely civic minded, and all devotedly interested in the children of the community and in the finest possible educational opportunity for them. Not only do the individual board members enjoy the unreserved confidence and respect of the citizens of the community, but they also constitute a representative cross section of its citizens. Included in the seven-member board are one housewife and prominent club woman, one business executive, two bankers, an industrial engineer executive of a large corporation, a plant superintendent of a large steel company, and a widely known radio news reporter.

Whereas it was necessary to convince the teachers that the new plan was professionally desirable and economically fair, it was necessary to convince the board of education that it was sound in principle and financially feasible. The overwhelming endorsement of the plan by teacher vote and the concurrent general pattern of wage and salary raises of 15 to 20 per cent in industry were convincing considerations. While the plan originally anticipated the necessity of a 1.5 to 2 mill increase in school taxes to finance it, an unexpected increase in assessed valuation was announced in time to make the plan possible without a tax increase. At the February meeting of the board the plan was introduced and each member furnished a bound volume of a complete analytical discussion of it. At this meeting the superintendent obtained authorization to prepare a tentative budget based on cost studies of the new plan. In the interval between the February and March meetings the superintendent furnished the members of the board with a series of prepared discussions of various aspects of the problem. At the March meeting the board officially adopted the Base-Pay Schedule and adopted experimentally for a period of one year the other features of the plan. At the same time the dollar value of both cost-of-living-allowance units and extra-duty-and-responsibility-pay units for the year 1946–47 was set at $50.

(To be concluded in December)

Planning the School Building Program*

*Harold H. Church, Ph.D.***

PART I. THE PRELIMINARY SURVEYS

One of the most important responsibilities of a superintendent of schools is to initiate and to complete effectively a planned program for the schools under his administration. His success in no small measure will be in proportion to his ability to plan successfully with vision and insight. If he does not take the lead in this important function of school administration, others may assume the role of the educational leader in the community, or the community will lag in its educational program because of his neglect of duty.

The postwar period toward which everyone was hopefully looking is here. Now it will be only a matter of time until conditions become normal. Business, industry, and alert social leaders are planning more effectively than they have ever done in the past. Schools have a rare opportunity to organize and establish an effective and progressive school program by planning with these local bodies. It is much easier while everyone is doing it than to plan separately when the parade has passed. If the schools neglect to plan now, they will have missed one of the finest opportunities which has come their way.

Planning the school-building program involves at least seven steps. The first step is the most important but, unfortunately, through careless and hurried administration is overlooked and the school community suffers from poorly planned buildings for years to come. It consists of three parts: the educational survey, the building survey, and the financial survey.

Three Methods of Survey

There are several methods of making a school survey, each of which has certain advantages and disadvantages. Three methods are suggested, namely:

1. A survey by educational and school building specialists
2. A self-survey conducted by members of the local educational staff
3. A co-operative survey conducted by members of the local staff and educational and school building experts

The advantages and disadvantages of each method, briefly, are as follows:

The survey by outside educational experts is the most costly, but is very effective and objective. It has the advantage of bringing educational experts into the local school system and projecting a modern educational program and a school building plan. While communities are sometimes reluctant to follow the recommendations of a local committee, they frequently will listen to the recommendations of a committee of educational experts. This survey committee will no doubt receive the criticism of the reactionaries in the community who then will not oppose the local school administration for planning a changed school program.

The self-survey made by members of the school staff has many advantages and some limitations. One of the chief advantages is that it is the best program of in-service training and professional awakening which any school system can devise. Even though staff members may be untrained and may be apt to arrive at faulty conclusions, they will have gone through a process of change and awakening which will more than offset any mistakes which may be made. If the superintendent is not familiar with the techniques and methods of survey, he can always refer the recommendations of his committees to educational experts in state universities for analysis and appraisal. Teachers, like every other group of individuals, resist change. If they participate in the survey and recommend changes to be made in the school system, they will adjust to newer methods and procedures with little or no resistance. This method should appeal to educators because it is "learning by doing."

The co-operative survey made by educational experts and the members of the school staff working together embodies the advantages of both of the above methods. It is not as costly as the expert survey and has an advantage over the self-survey in that the committee is not as likely to arrive at faulty conclusions. It provides an opportunity for the staff to rub shoulders with educational experts and become familiar with modern educational trends and philosophies.

*This is Part I of a comprehensive paper and represents principles and methods used in developing the Postwar School Building Program of the Elkhart, Ind., school system.
**Superintendent of Schools, Elkhart, Ind.

The Educational Survey

The purpose of the educational survey is to re-examine the philosophy, organization, trends, curriculum, methods of instruction, educational training of the staff, the instruments of instruction, and the materials of learning. The curriculum, methods of teaching, instructional materials, and instruments of learning should be consistent with the accepted philosophy of the school.

The superintendent of schools, as the elected educational leader of the school system, should present a workable survey plan and invite every member of the staff to participate. Any number of committees could be organized, dependent upon the breadth of the survey and the needs of the school community. Among the more important committees, with their responsibilities briefly defined, might be the following:

1. *Aims and Objectives Committee:* This committee should re-examine the philosophy of the schools in the light of modern educational trends and development. If the school has no expressed philosophy, one should be formulated which should include the aims and goals of the local educational program. This philosophy should be a practical and democratic one which can be defended in the light of a modern educational program designed to train pupils to live in a democratic social order. Every member of the staff should be urged to make contributions which he would be prepared to accept and defend. This committee is the most important of the educational survey committee because it establishes the goals toward which the thinking and action of every other committee should be directed.

2. *School Organization Committee:* This committee should decide what is the best pattern of school organization for the schools of the community. That is, shall the schools be organized on a 6-3-3, 6-2-4, 8-4, or some other plan of organization? It should study the advantages of extending the school program to include preschool grades in the kindergarten or nursery school or post-school grades in junior college or vocational training. It should decide whether the school operates most effectively on an annual or semiannual plan of promotion; whether the elementary grades shall be departmentalized, organized in areas of instruction, on a platoon system, or on a self-contained classroom plan, etc.; whether the high school courses of study shall be organized on a single or a multiple track plan, etc.

3. *Record and Grades Committee:* This committee should investigate the kinds of school records which are being used. It should compare the advantages and disadvantages of the school's educational records with those of other outstanding schools. If no pupil's cumulative record or staff's personnel record cards are used, it should present the advantages of using such cards. It should study the type of report card which is being used and determine whether it reflects the philosophy accepted by the school; also, whether the report card is the most effective medium of interpreting the progress of the pupil to the parent. Further, it should study the most effective method of reporting the progress of pupils, that is, shall it be reported in percentage, in letters, in "satisfactory" or "unsatisfactory" marks, or in some other manner? Finally, it should determine whether pupils shall be marked only in skills and knowledges or whether they shall also be appraised in attitudes, habits, conduct, appreciation, and understanding.

4. *Test and Measurements Committee:* This committee should determine what kinds and types of tests can be used to help accomplish the aims of the school. It should answer such questions as, when and how often pupils should be tested for mental capacity. Also, it should decide whether prognastic tests shall be used, if so, what ones and when they shall be administered. Also, whether achievement tests, diagnostic tests, aptitude and personality tests, and the like shall be used. Further, it should determine the approximate cost of such a program so that this cost may be included in the school budget.

5. *Guidance Committee:* The purpose of this committee should be to appraise the guidance services of the school; initiate a plan to inform staff members of the important duties and responsibilities of guidance personnel and techniques: recommend whether additional personnel, rooms, offices, or equipment are needed; and propose an ideal guidance plan for the school system.

6. *Curriculum Committee:* This committee should survey and re-evaluate the school curriculum. A survey should be made of the curriculums of other comparable schools. Also, a survey should be made of the vocational and educational needs and possibilities of the local community. A curriculum laboratory could be established and specialists in the various subject matter fields could be used as advisers. Parents should be encouraged to make their recommendations regarding the needs of their children. Employers of the graduates should be invited to appraise the school training. A survey should be made of the success of graduates attending college and other advanced training institutions. Educational leaders should be invited to meet with the committee. At the conclusion of the study, a curriculum for the entire school should be drawn up and recommendations made for the most ideal school plants to house and conduct the curriculum recommended. Care should be taken to avoid any overlapping of subject matter and to see that the curriculum provides for the needs and interests of the pupils.

7. *Courses and Subject Matter Committees:* At least ten such committees should be created in the secondary field, namely, English, social studies, mathematics, language, science, commerce, home economics, vocational arts, health, music, and art. On the elementary level a minimum of three committees should function, namely, kindergarten, primary, and elementary. Three other desirable committees might be a Graduate Survey Committee, a Visual and Audio Education Committee, and a Professional Committee. All of these committees should be encouraged to submit their ideas and plans of the classrooms, laboratories, and school facilities needed to successfully conduct the classes recommended.

Plan of Committee Action

If local teacher committees are appointed for the educational survey, rather than having the survey conducted by a group of education experts, the following plan has been found to function most effectively:

a) Survey the present local practices, methods, and educational materials available.

b) Locate school systems which are recognized as outstanding in the fields studied by the committee.

c) Find out through questionnaires the practices, methods, and materials used by these outstanding schools.

d) Visit one or two of the schools found to be most progressive and effective.

e) Survey recent trends and practices as reflected in educational writings and lectures.

f) Make recommendations for the local school system which are practical and consistent with the goals agreed upon as stated in the philosophy accepted.

g) Have the work of the committee appraised by some responsible educational expert in the field who is not a staff member.

h) Revise recommendations if necessary.

The Final Report

Whenever the survey is completed, the report of all committees should be written up in separate chapters and published in mimeograph form. In order that there will be some uniformity in the writing up of the chapters, the following outline has been found to be effective.

a) Describe present local practices.

b) Describe what the committee has discovered to be the general practice in other schools.

c) Briefly describe how the committee functioned.

d) Record the results in forms of graphs, tables, etc., if the committee conducted a survey.

e) State specific recommendations according to the findings of the committee.

f) Make suggestions as to how the recommendations of the committee can be made effective in the light of our present setup.

(To be continued in December)

Students Find Learning is Fun as Motion Pictures Move into City Schools

Syrilla Everson

PUBLIC RELATIONS — A CO-OPERATIVE APPROACH

H. L. Shibler, Superintendent of Schools, Highland Park, Michigan

Those who render to us effective, willing, and efficient service, we hold in high esteem. If this service is greater and goes beyond what we might commonly expect, we have a feeling of dependency and indebtedness to the source of the service. It is placed in a position of leadership to us. Such a position of leadership is the rightful place of the school in the community. It can be secured if the school is willing to offer a service in the community that goes beyond the four walls of the classroom, a service that is unexpected perhaps by the general public but needed in the community, a service that surprises but highly pleases. This is good public relations.

Of course, the extent and kind of services given a community by a school system will depend upon the educational philosophy held by the board of education and the professional staff of the schools. If this philosophy is time-clock punching, highly academic and cloistered, with the entire resources of the school incarcerated within its institutional walls, then nothing can be expected in the way of the community service being talked about here. However, if the school program is conceived as a live, functioning force, interacting with other forces in the community in one organization for the common good, then possibilities for outgoing school service are almost unlimited.

In schools, as in business, satisfied customers are the best public relations agents. The customers in the case of a school are students and their parents. Of the two, the students are the most potent and persistent publicity agents of the school. In addition to satisfied customers the school, as in business, must constantly keep a gentle pressure on the consciousness of the public through a publicity program. This can be done by various means. The local newspaper offers one of these means.

One outlet of the Highland Park Schools' public relations program is through the local newspaper, "The Highland Parker." By arrangement with this paper, they wrote a series of articles on various phases of the school program. The writing was done by a newspaper person so the articles would be carried in newspaper style and presented somewhat from a layman's point of view. The stories covered such areas and courses of the school program as "Visual Aids," "Homemaking," "The Veterans Program," "School Radio," "Driver Education," Special Education," and "Health Activities and Services." The article that follows deals with the "Visual Education Program."

In presenting this series of articles it is felt that a service is being rendered, not only to the schools, but in greater measure to the general public. The people create their schools and support them. But the people need also to conceive of their schools as dynamic institutions actively using modern techniques, knowledge, and equipment to meet present-day needs of the community and its youth.

If your children come home from school with exciting tales of having seen the Black Bear Twins, you need not worry for fear they skipped school to patronize a local movie house. On the other hand you may rest assured that they have learned their studies well, for motion pictures are now used in Highland Park schools as an integral part of the teaching process.

Two hundred films are on file in the school film library for use from kindergarten through junior college. "A Handbook of Films" lists the titles of films available for use in the classroom. Synopses written by the teachers describe each of the films which range in scope from atmospheric pressure and diphtheria to the adventures of Bunny Rabbit and Robin Redbreast.

The philosophy behind the program of visual education, according to Roy E. Robinson, chairman of the Visual Aid Committee, and administrative assistant in charge of instruction, is the belief that pupils can learn better with this new and modern tool, whether their goal is to acquire skills, accumulate knowledge and information, develop attitudes, or merely to be entertained.

As Entertainment

In explaining this last use of the motion picture, Robinson said that Highland Park teachers have gone beyond the belief that entertainment has no place in the school system. They believe instead that the best learning is fun. A usual outgrowth of sheer entertainment, he said, is to stimulate interest in cultural spheres. This fact was demonstrated with the showing of the film "Little Women." Although the picture was shown to elementary school children for little other reason than to present a worthwhile movie, it created such an interest in the book that enough copies could not be gathered to meet the demand.

The place of the movie in supplementing the teaching techniques is tremendous, Robinson said. For instance elementary teachers find them of great value for use in language expression. They serve as a kind of starter for those children who find speech difficult. They help youngsters express themselves. A good movie for self-expression, Robinson said, is the film "The Adventures of Bunny Rabbit." When the movie reaches the point at which Bunny hides in the hotbed from Farmer Brown who is just about to search the lettuce for his young intruder, children, full of concern for the rabbit, jump to their feet and scream, "Run, Bunny, Run."

At other times primary school teachers run the films without the sound. When this is done students take turns telling the story. In that way they learn to express themselves and to communicate their thoughts to others.

In Technical Fields

On the secondary level, three purposes are achieved with the movie. In the first place, teachers are able to develop technical ideas which, without the use of these visual aids, would be impossible — or at the best, difficult. Since much of the equipment needed in teaching about many of the technical things are prohibitively expensive, the motion picture is the only means of supplying the material.

A second important use of movies on the secondary level is to dramatize information. "The Importance of Vaccination" is one of the movies used by the health service of the board of education to strengthen its program of disease prevention.

This year seniors will be given an opportunity to acquaint themselves with the District of Columbia even before they board the train on the "Washington Trip." The movie, "The Nation's Capitol," will be shown to seniors in an attempt to point out places of interest before they set out on the tour.

One of the most important uses of movies is to create or modify attitudes, a necessary job of the school system if young people are to learn to live amicably in our present world, Robinson said. A recent addition to the film library for this purpose is a movie purchased from Great Britain entitled, "The United States." It is of considerable value, he said, in that it helps Americans see themselves through the eyes of the British. If we are to assume our proper place in world fellowship, he said, it is vital that we see how we appear to peoples in other countries. Another film of this type is "Now the Peace" which outlines the structure and workings of the United Nations.

To Change Concepts

Students in the middle division, or high school, are having their stereotypes about

The American Commission UNESCO

When the United Nations Educational, Scientific and Cultural Organization meets in Paris in November the United States will be represented by a number of the above group of prominent educators representing every division of public and private elementary, secondary, and higher education of the United States. Before preparing its own program to be presented at Paris, the Commission met for three days at Washington, and paid its respects to President Truman. (Harris & Ewing Photo)

geography altered through movies. More modern, global concepts of the relationships between countries with respects to transportation routes are being spread through the use of the film, "How the Airplane Has Changed the World Map."

Still other uses of the films are to stimulate discussions. They are popularly used by teachers here as a kind of springboard for discussions on social and moral questions.

Mrs. Clara Strong, in charge of the laboratory nursery school program, uses the March of Time film, "Life With Baby," as a means of condensing the material she presents to seniors. Through the movie she is able to present more material in a shorter length of time on child care and development.

Because the school board believes that this relatively new teaching device has great potentialities, equipment in Highland Park is both modern and complete. Every school is equipped with a visual education room, where screens are set up ready for use. Auditoriums are also used to show films to large groups. All this is accomplished, Robinson said, at no greater cost than the cost of providing pencils to students.

It is the desire of the board of education, Robinson said, to equip every teacher in the school system with the knowledge of how to operate a motion picture projector. Many schools have already achieved this. For example, at Ford School every teacher including the nurse can operate the machine.

This aim means a new kind of homework for the teacher. Beginners at the job go through what the faculty jokingly calls the "lens-wiping" stage. At this level teachers are concerned only with learning to operate the equipment and gaining a familiarity with it.

Purpose in Mind

At the next level, they are concerned with relating the film to their course of study. Here the teacher has a purpose in mind when showing the movie. At the final stage both the teacher and the student have a purpose. On this highest level of operation, the teacher has so integrated her lecture material and the movie that students have some definite view in mind when they see the film. Successful use of films, Robinson said, means that teachers use films to supplement their material, and to stimulate discussion. Then they re-show the movie to make certain the material is clear.

Other visual aids are film strips with or without sound and recordings. Records are of particular assistance to teachers in the foreign language and radio departments.

The entire field of movies in education is relatively new, Robinson said. It goes back only as far as twenty years when theatrical size projectors and films were used. Real progress in the field is as recent as 1929, when the 16mm. film was made available. In that year, Highland Park began its collection of films with the purchase of 50 or 60 silent movies. The first sound projector was purchased only eight years ago. Since then, however, visual education has earned a place in the school system.

Visual Aid Committee

The Visual Education Committee, comprised of 12 teachers representing Highland Park's eight school buildings, has been formed to help the faculty keep abreast of the development of visual aids. It is the duty of this committee to study the materials available, effective utilization, and students' reactions to films.

(Concluded on page 76)

Speech Improvement for the Elementary School

Geraldine Garrison[1]

The busy classroom teacher does not have time to do individualized speech therapy, but she does have an opportunity in her regular classroom work to call attention to poor speech habits; and with an understanding of the speech problems involved, she often can help the children to overcome their defects and to obtain acceptable American English. "Speech that does not call attention to itself" is good acceptable American English and should be the goal set up by each classroom teacher. The following suggestions for speech improvement are intended for the classroom teacher who has had little or no training in corrective speech, and the trained speech therapist will benefit little from them.

In every classroom there are a number of children who have speech that is very difficult to understand; these children have not, for various reasons, learned how to form their speech sounds correctly. Many children without help are able to eliminate their sound substitutions and peculiarities, but many are not able to obtain acceptable speech without help. As the speech defective child grows older, he is often subjected to humiliating incidents. His little friends call him "mushmouth" and other names so that he feels inferior, shy, and not accepted as one of his group. His feelings of insecurity and not belonging often lead to his disliking school, and that feeling may lead to truancy or even worse results. Often help in the lower grades would have prevented all of the failure, personality maladjustment, and dislike for school that may come in the later years.

The classroom teacher can do much to help these handicapped children by spending only a few minutes a day in either group or individual work. Either the reading class or the spelling class offers a good opportunity for the class to work as a group on improving their diction; making final consonants distinct; overcoming lazy lips; eliminating harsh, thin, nasal voice qualities; and in establishing the correct formation of speech sounds. These classes offer an excellent opportunity to associate the written symbol with the spoken sound so that the child gets the stimulation by means of the visual, kinesthetic, and auditory sense. Much can be accomplished by using five to ten minutes a day. Thus in the group the child is not singled out as being different, and all of the children realize their need for better speech and diction.

[1]Connecticut State Department of Education, Hartford, Conn.

The Human Speech Mechanism

Before the classroom teacher begins the work in speech improvement, she should have a working knowledge of the speech mechanism. No part of the human body was made for the production of speech alone, but man has been able to take the available mechanism and use it for a two-fold purpose, and as a result man is able to speak and communicate to others his ideas, desires, and dislikes. The lungs supply air both for keeping man alive and for the production of his speech. The so-called voice box or larynx contains the vocal bands which have been misnamed the vocal cords. Now in order for the teacher to be familiar with the different parts of the mouth used in speech production, she should put her tongue to the upper teeth, then move up until her tongue leaves the teeth and she feels them under her gum; this is called the teethridge or the alveolar ridge. As the tongue is raised higher in the mouth, it touches a hard substance known as the hard palate. Then as the tongue is moved farther back in the mouth it feels a soft place known as the soft palate; the soft palate region and the uvula hanging down in the back of the mouth are all known as the velum. In the larynx the vocal bands can be felt to vibrate. These vocal bands vibrate for some speech sounds and they remain quiet for some. The child gets the idea of their vibration if he thinks of them as a motor in an airplane or engine. He can feel them vibrating if he puts his hand on the larynx or voice box. Practice should be given "turning on and off the motor" until he is able to do it at will.

Using Life Situations

When trying to teach a child a correct sound, always use every available means to give him a life situation. There are many sounds in nature and in his everyday life which he recognizes and can make correctly such as the sound the wind makes as it blows around the corner of the house (the **z** sound); the sound the radiator makes, air coming from the tire, or the warning the snake gives (the **s** sound); the name of the train chu-chu (**ch** sound); the noise the spitting cat makes (the **f** sound); the growl of the dog (the **gr** blend), and many, many more. The sounds can easily be transferred to the child's speech vocabulary, thus using them as part of a word which he has been making incorrectly.

The child may make correctly a sound in one position and not be able to make that sound in the other positions, or he may be able to say a speech sound correctly in only one word. When he does have a speech sound correctly made in his speaking vocabulary, work from that correct sound to forming it correctly in other positions and in other words. By positions is meant the initial position, **pie**; the medial position (**supper**); the final position, **cap.** If the final **p** is made correctly, associate it with the initial sound to get a carry-over in the word **pie**.

Remember the name of the letter is **p,** but when we say the sound we do not say **p,** we say the sound combined with a vowel as *pu, pa.* Try it and see. Thus we say the **p** letter or symbol and the *pu* speech sound.

Remember the basis for correcting articulation defects is ear training. We talk because we hear and we tend to say what we hear. So the child should hear the correct pronunciation of a word many times or until he is able to tell when the word is said correctly and when it is said incorrectly. If after a lot of ear training the child is still unable to make the sound correctly, then combine speech corrective devices with the ear training. Generally it is thought best to make "play" out of the corrective work, but often children even in the first grade love to do "real work." The following helps often are useful to the busy classroom teacher, and the children generally like the exercises. There are many ways to get the correct formation of the different speech sounds, and here are ways often found helpful.

The Troublesome Consonants

The consonant speech sounds give the most trouble, but they are not too difficult to correct. First there must be ear training. Then remember we talk not in speech sounds, not in syllables, not in words, but in sentences using the speech sounds, syllables, and words. Even though there is drill on sounds, syllables, and words we always finish the work by using the practiced sound in a sentence. If the child can make the speech sound correctly combining it with the various vowel sounds, he can say the sound correctly in any word. The following nonsense drills are examples of ear training and drills.

sss – si – si – si – si – side.	Sit on this *side* of the table.
sss – si – si – si – si – sit.	Please *sit* here.
sss – sa – sa – sa – sa – sail.	There is a sail-boat.
sss – sa – sa – sa – sa – Sam	(sentence)
sss – sau–sau–sau–sau– sour	(sentence)

sss – se – se – se – se – seed (sentence)
sss – se – se – se – se – set (sentence)
sss – so – so – so – so – sold (sentence)
sss – so – so – so – so – solid (sentence)
sss – su – su – su – su – Sue (sentence)
sss – su – su – su – su – supper (sentence)
sss – so – so – so – so – saw (sentence)

Let the child see the symbol, hear the speech sound, and get the muscular feel as he says it. It is often helpful to use a mirror letting the child see what he is doing. Let him see you, as the teacher, do it correctly; then compare what he is doing with your correct model.

How Consonants Are Sounded

Briefly, here is a summary of the ways in which the different consonants are made. There are other ways, but these are probably the easiest and best.

h is made by simply sending the breath out through the lips. If a child omits the sound of **h,** let him "puff" or "cough," feeling the air on the back of his hand. The teacher demonstrates using the child's hand. Then add ***ha, hi,*** and the other vowels to the puff of air.

p–b are made exactly alike except that the vocal bands vibrate for the **b** sound. These sounds are *plosive* sounds, that is, the lips are held firmly, the air is dammed up and then released with an explosion thus plosive–explosion. It is often helpful for the teacher to hold the arm of the child between her forefinger and thumb quite firmly then release it quickly. If the **b** sound is made correctly, simply turn off "the motor" in the throat to get the **p** sound. Combine the sounds with the vowels for drill; then use the list of words: **pie, paper, cup, boy, baby, tub.**

m is a nasal sound. The soft palate is down so that the breath comes through the nose instead of the mouth; the lips are together lightly. Humming generally produces a good **m** sound: **man, summer, arm.** Combine **m** with the vowels for drill; use a list of *m* words that are in the child's everyday vocabulary.

w–wh generally do not cause any difficulty. The lips are rounded and the child sends the breath through the rounded lips. If the **wh** sound is not made correctly, have the child blow with more force than for the **w** sound, letting him feel the air on the back of his hand. **Went, away,** ———. (The final **w** takes on the vowel sound.) **Wheat, somewhere,** ———. (There is no final **wh.**)

f–v are made alike except that the vocal bands vibrate for the **v** sound. This sound is made by biting the lower lip and blowing the breath stream continuously. Often the teacher can slip the child's lower lip up to his teeth as he blows, thus making the sound. It also helps to let the child see in the mirror just what is being done. If the **f** sound is made, "turn on the motor" to make the **v** sound: **four, after, leaf; vine, river, stove.** Use the consonant plus the vowels and a list of **f–v** drill words. Sometimes the child who cannot make the **f** sound can imitate a spitting cat which is the **f** sound.

The Difficult "th"

th as in **bath, th** as in **bathe.** These sounds are made alike except that the vocal bands are vibrating for the **th** in **bathe.** The **th** in ***bath*** is called the ***Theta,*** and the **th** in ***bathe*** is known as the ***thorn;*** these names date back to the Anglo-Saxon language. The **th** sounds are normally made by touching the back of the upper teeth with the tip of the tongue. The child who does not make the **th** sounds correctly, however, will have difficulty making the sound this way as there are several other speech sounds made near this position. The child will have little trouble making the **th** sounds if he is instructed to stick out his tongue between his teeth pretending that the teeth are holding the tongue which is pulling and trying to get away; the tongue is successful and does slip away from the teeth, thus making the **th.** This prevents the child from biting up and down on the tongue which will not produce the **th** sounds. It sometimes helps for the teacher to pretend that the child's fingers on one hand are his tongue while her fingers and thumb are his teeth. She holds his fingers firmly while he pulls them away; thus he gets the idea of pulling his tongue through his teeth. **Th**ank, no**th**ing, bo**th** (theta); **th**ese, fa**th**er, ba**th**e (thorn). If the theta is made first, "turn on the motor" to get the other **th** sound (thorn).

s–z are made alike except the vocal bands vibrate for the **z** sound. Combine ear training with sounds in nature, bees, snake, sound of the teakettle, air from the tire, etc., to stimulate these speech sounds. Since it is impossible to see how the **s–z** sounds are made, it is helpful to have the child put the tongue up to the alveolar ridge, put the teeth practically together, keep the lips straight across and not arched, and send the breath straight out, trying to hit the central front tooth. Combine the **s** or **z** sound with the various vowels, making nonsense syllables, words, and sentences. The **z** sound is made by "turning on the motor."

Two Plosive Sounds

t–d are plosive sounds, as were the **p–b** speech sounds. **t–d** are made alike except that the vocal bands vibrate for the **d** sound. The tongue goes up to the alveolar ridge, the air is dammed up and suddenly released with force. Let the child feel the breath on his hand as the teacher correctly makes the sound. Let the child see the teacher's tongue as she makes the sounds, combining them with the vowels and in words. **table, letter, cat; day, lady, bird.**

l is made by putting the tongue up to the alveolar ridge and then letting the air spill over the sides of the tongue; thus it is the only lateral sound in the English language. Generally the child who is not making the **l** sound is letting the tongue lie on the floor of his mouth, and by simply showing him that the tongue goes up to the roof of the mouth and by showing him how to make **la–la–la–la–lady, li–li–li–like, lo–lo–lo–lo–load, la–la–la–la–laddie,** he is able to make the *l* sound easily.

n is made by putting the tongue up to the alveolar ridge and letting the sound come through the nose. This sound is generally made by making the child conscious of the vibration in his nose and face. Humming with the lips apart while the teacher gives the ear stimulation by saying the **n** sound will nearly always bring a good *n* sound.

The **r** sound is both a consonant and a vowel sound. The initial **r** in **red, rose, rabbit** are all consonant sounds and are made with the tongue at the alveolar ridge, while the **r** sound in **burn, girl, fern, fur** are vowel sounds and are made in the mid-position of the tongue and mouth. The **r** speech sound requires much ear training and is often one of the most persistent defects to correct. Do not tell the child that the sound in **red, roses, rabbit** is **er** because it is not; and when the child is taught to say **er red, er roses, er rabbit** he has not made a correction, but he has added a speech defect. Combine the **r** with the different vowels in nonsense syllables to give auditory kinesthetic and visual perception. If the child substitutes the **w** for the **r** show him in the mirror that he is using his lips instead of his tongue to make the **r** sound; show him that the lips are not rounded for the **r,** but are pretty much straight across.

Turning on the Motor

sh–zh are made alike except that the vocal bands vibrate for the **zh** sound. To make these sounds take the position for the **s,** move the tongue a little farther back in the mouth, open the teeth some, round the lips a little and say the sound for the child to hear and to say with the teacher. **zh** is made from **sh** by "turning on the motor." **Sh**oe, bru**sh**ing, di**sh**; plea**s**ure, gara**g**e.

ch–j are made alike except that the vocal bands vibrate for the **j** sound. The child generally can make the *ch* sound if he is reminded that it is the same sound the train makes: chu-chu-chu. This sound is exploded some, and the child often can make it correctly if he sneezes or coughs out using the sound **chu** as he sneezes or coughs. **Ch**air, tea**ch**er, ea**ch**; **J**ohn, engine, oran**g**e. Use the vowels, combining them with the **ch–j** sounds, in words and in sentences.

y is made with the tongue on the floor of the mouth. If the child says **l**ello for **y**ellow, he has the tongue at the alveolar ridge, and by simply putting it behind

The spirit as well as the reality of an Ohio country school of 1871 with its dusty floor, inadequate lighting, and uncomfortable seating, is portrayed by Winslow Homer in the painting reproduced above. The picture recently has been acquired by the City Art Museum of St. Louis for the sum of $25,000.

his front teeth, with practice, he says *yellow*.

k–g are made alike except that the **g** sound has the vocal bands vibrating. These sounds are made by the back of the tongue moving up to the soft palate, damming up the air and then releasing it suddenly with an explosion thus making the sounds plosives. The child generally makes the **k–g** sounds immediately by telling him to pretend that he has a piece of popcorn in his throat and is trying to cough it out. Combine ear training with the exercise using the various vowels, words, and sentences.

ng is not a combination of **n** and **g** but it is a new sound which probably came into the English language during the Anglo-Saxon or Middle English period. Children with foreign language background usually sound the **g** in addition to the **ng** thus singing is sing**g**ing. The child generally makes this correction by having him think of the sound as ***n*** and not pronouncing the **g**; he will, with practice, say singing and not singin' as might be expected.

There are a few sound substitutions that every teacher comes in contact with; and although they are annoying, they are fairly easy to correct. These suggestions, if sufficient practice is given, usually eliminate the difficulty.

y is substituted for **l** giving *yady, yamp, yemon* for *lady, lamp, lemon*. The tongue is lying on the floor of the mouth for the **y** sound; so have the child lift it up to the alveolar ridge. Give ear training showing the difference between the two sounds, and practice the exercise of combining the **l** with the different vowels. Example: **la–la–la–la**dy, **la–la–la–la**mp.

l is substituted for the **y** sound. The child is holding his tongue at the alveolar ridge when it should be behind his front teeth; put the tongue in the right position and use ear training combined with vowels **yel–yel–yel–yel**low.

When a Mirror Will Help

w is substituted for the **l**. The child is making the sound with his lips instead of using his tongue. By use of the mirror show him what he is doing. Use ear training with the vowel drill.

w is substituted for the **r** sound and the child says *wed, woses, Little Wed Widing Hood, wabbit* for *red, roses, Little Red Riding Hood, rabbit*. Again he is using his lips to make the sound of **r** instead of his tongue.

t is substituted for the **k** sound, and the child says *tandy, ice tream, boot*. When the child substitutes the **t** sound for the **k** sound, he is using the tip of his tongue instead of the back portion of his tongue to make the sound. Call attention to the back of the tongue by having him pretend he is coughing out the piece of popcorn. By the teacher's pushing up and out with her forefinger and thumb on the sides of the child's throat just below his jawbone, the child will generally make a good **k** or **g** sound. Ear training plus drill should be used also.

th is substituted for **s** giving *thoup, thoap, tham* for *soup, soap, Sam*. The tongue is either between or touching the teeth. By use of the mirror, show the child that the tongue is not seen, but is up at the alveolar ridge while the teeth are practically together.

t is substituted for **f**. The child should be shown in the mirror how to bite the lip to make the **f** sound. The same procedure would be used if he said *dine* for *vine*.

The following books are helpful in speech improvement:

Van Riper, Charles, *Speech Correction, Principles and Methods*, Prentice Hall, Inc., 1939, $2.50.

This book, written in language and vocabulary easy to understand, gives general information about speech difficulties with specific helps in correcting the defect.

Stoddard, Clara B., *Sounds for Little Folks* (Boston: Expression Co., 1940), $2.50.

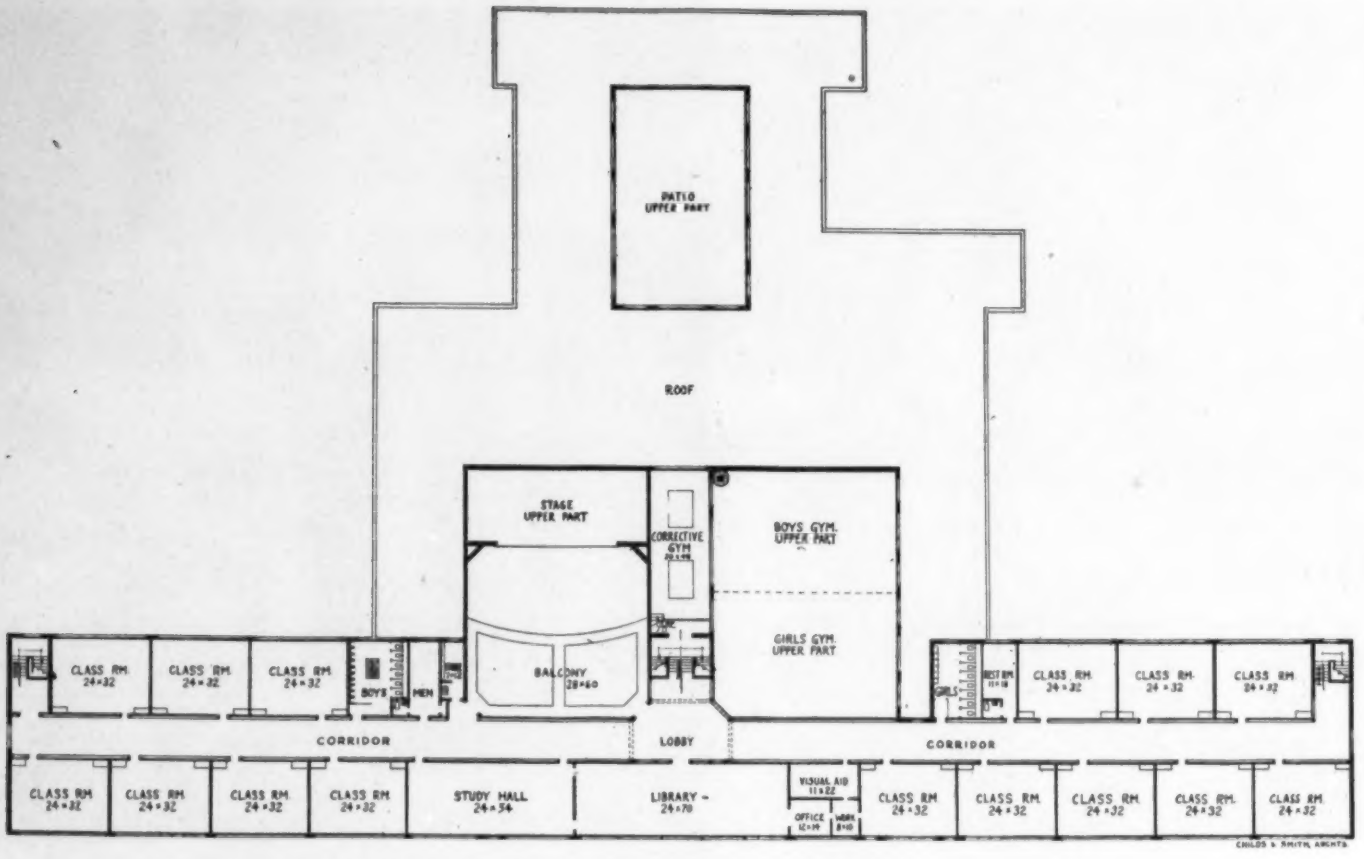
This book consists of pictures, word lists, and rhymes. It is an excellent book for drill materials in the lower grades and kindergarten. The children love it.

Schoolfield, Lucille D., *Better Speech and Better Reading* (Boston: Expression Co., 1937), $2.50.

This material consists of word lists and materials for the child who can read simple printed materials.

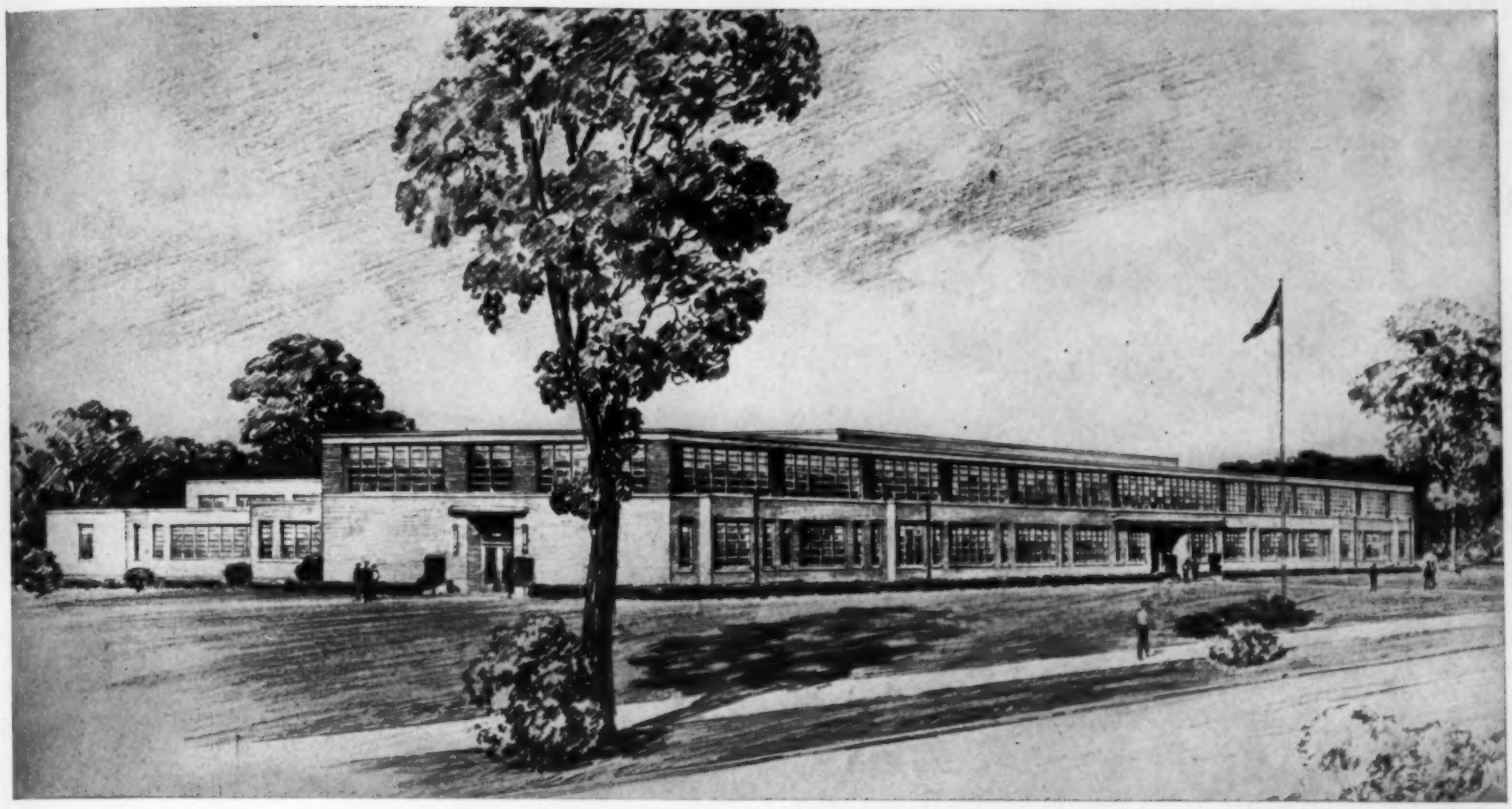
Robbins, Samuel D. & Rose, *Correction of Speech Defects of Early Childhood* (Boston: Expression Co.), $1.50.

This book gives specific helps on correcting common speech defects.



Second Floor Plan for a Junior High School. — Childs & Smith, Architects, Chicago.

First Floor Plan for a Junior High School. — Childs & Smith, Architects, Chicago.



Perspective of a Junior High School planned with a unified art department as the main center of activities.
Childs & Smith, Architects, Chicago, Illinois.

The Junior High School and the Unified Arts

Frank A. Childs[1]

The advent of the unified arts program in our schools has suggested a thorough restudy of building plans to provide proper grouping and location of these various units.

As the name implies, such a plan should express the idea of unity or unification of all the many centers around a focal point or meeting place, affording an extended view of each department through glass panels and direct openings.

The arrangement here suggested includes:

Multiuse patio, or focal point
Practical arts shop
Drawing and art
Library and research center
Textile laboratory
Living room center
Foods laboratory
Cafeteria kitchen and service
Agriculture and science
Music, band, and choral
Practice theater and visual education
Faculty dining and classrooms
Gymnasium (boys and girls)
Swimming pool
Auditorium (dressing and green room)
Display corridor

As exemplified in recent bulletins, the immediate scope of the unified arts program may be stated as follows:

1. To instill appreciation and respect for the importance of work
2. To discover individual aptitudes, abilities, and interests in trade and industrial occupations
3. To provide contact with interesting and valuable leisure-time interests
4. To develop a reasonable degree of skill in the use of hand tools in doing ample repair and construction work in the home
5. To develop in each pupil the habit of an orderly method of procedure in the planning and performing of any project or task
6. To assist in a more intelligent selection, appreciation, and use of industrial products and services from the standpoint of the consumer
7. To acquaint boys and girls with certain rudiments of food values (calories, etc.,) basic food preparation of simple meals, nursing, and first-aid requirements
8. To initiate taste in choice of home furnishings, decoration, and color
9. To provide saner judgment and choice in clothing, dress, and millinery
10. To develop some measure of musical appreciation for all, and actual participation for those of moderate talents
11. To appreciate the value of pleasing address, presentation, and salesmanship through the facilities of the Little Theater (visual education), the auditorium, dressing and green rooms
12. To develop satisfactory habits and standards of personal hygiene, mental and physical health by daily exercise in the gymnasium and swimming pool
13. To provide a more comprehensive appreciation of nature, landscaping, rural and farm problems through the science and agriculture laboratory
14. To stimulate individual student interest and co-operation in all the various centers by constantly renewed exhibits in the display corridor

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[1]Architect, member of the Firm of Childs & Smith, Chicago, Ill.

The art display corridor in the Haven Intermediate School, Evanston, Illinois. — Childs & Smith, Architects, Chicago.

15. To attract civic interest to the school by careful daily maintenance of all centers as practiced in our store windows and the commercial world

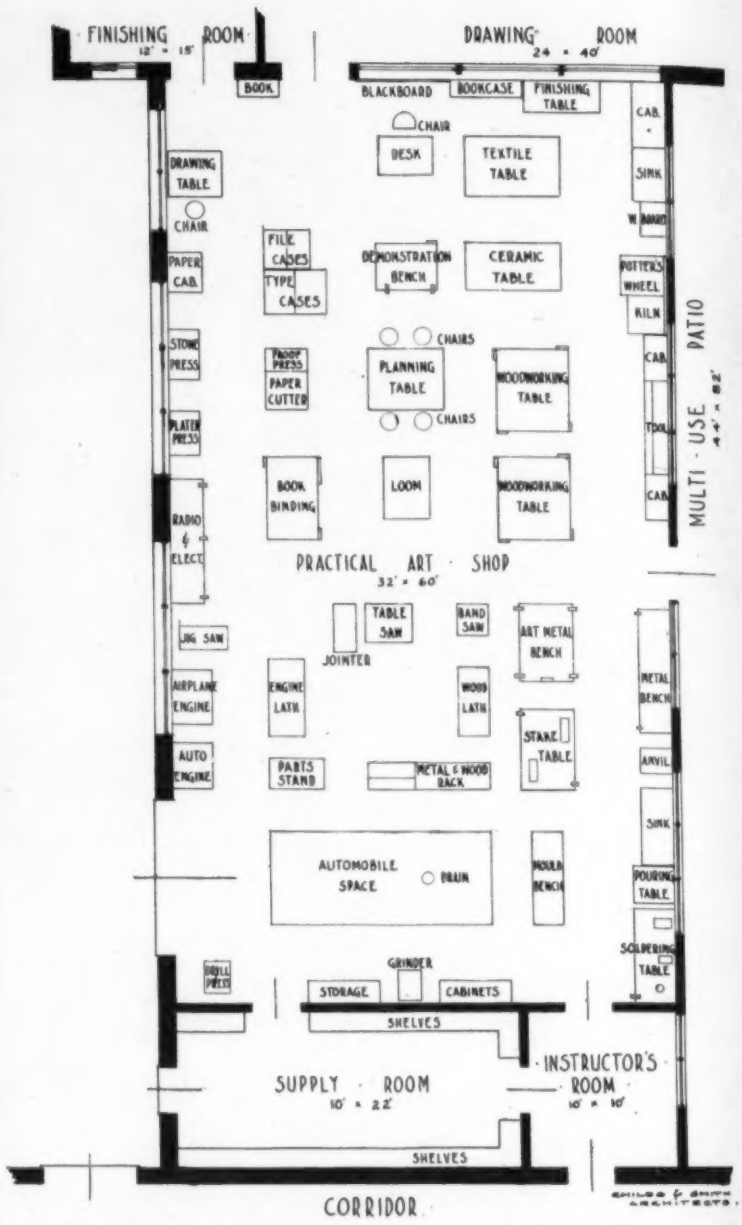
16. Finally, to contribute to the realization of a high standard of culture in all of life's undertakings, eliminating many unfortunate phases of our modern civilization.

A logical plan arrangement is the first step and has a great part to play in selling the unified arts program to the general public.

The multiuse patio serves as a foyer to the various art centers lighted by clerestory windows. It has a floor area 44 by 82 ft., and provides ample space for dining, dancing, festivals, pageants, games, and recreation. It should be treated in strong color, recalling the lighter pastel shades of the various centers seen through the glass panels.

The philosophy of the unified arts program is strikingly illustrated in the practical arts shop. In this space, 32 by 60 ft. in area, the following activities are provided:

Machine shop practice	Leatherwork
Automobile mechanics	Printing
Sheet metal	Photography
Electricity	Textiles
Cabinetmaking	Related mechanical drawing
Boatbuilding	Flying model aircraft construction
Home mechanics	Maintenance and repair
Ceramics	Glider construction
Bookbinding	



Floor Plan of a General Shop for a Junior High School.

The mechanical drawing and fine arts have been combined in one studio adjoining the library and research center.

Adequate ventilation in the practical arts shop should be provided. Dust collectors over shop machines are very necessary. A glass partition, separating the wood machines from the printing and other universal arts, would be advisable.

Large dimension lumber is stored on a mezzanine floor over the supply room which has direct outside access. The entire ceilings of all spaces are best sound insulated.

Band and choral rooms are provided with soundproof walls and doors. Dual uses of all special rooms are urgently suggested to insure their occupation 80 per cent of the time. The choral room may, therefore, become a classroom or visual aid center for the unified arts department for class-size groups.

A room, 11 by 22 ft., for preview, screening, and listening has been provided adjoining the librarian's office and workroom on second floor. Expansion of this feature may be cared for in the adjoining classroom, thoroughly soundproofed and fitted with channels at the windows for lightproof shades. In this room sections of standard shelving are provided with space provision for special cabinets, cases, files, etc., that are suitable for storage of recordings, mounted pictures, film strips, stereographs, and other visual aid materials.

Conference rooms may be provided between the library and the study hall. Modern standards prohibit more than one hundred readers in a single room, thereby requiring a series of library rooms in communities where the unified arts center serves a large enrollment.

With the advent of the atomic world, the stimulation of the individual is of paramount interest. While excellent teachers may achieve results with little or no equipment, a properly planned school, housing all its various departments in an appealing manner, should prove the initial step in raising our educational standards and maintaining our leadership in world affairs.

The "Preplanning" of School Buildings

H. W. Schmidt

The above term is a rather new one which may need some explanation, though in many instances its connotation has been observed in practice without this special designation. But it may be expanded somewhat to cover items not always considered. In short it simply means that in planning a school building every agency, or person, with any interest in it, should be consulted and have a say-so; architects, teachers, administrators, school boards, and even the janitors and engineers — all will have something to contribute for "the good of the cause." Much of this material will be transmitted to the architect in verbal form, and it is his task to translate this material into objective form, but still in terms of a preliminary plan. These revised sketches should then be submitted to the interested groups and in turn the suggestions translated into their educational significance and use, and differences of opinion ironed out — and there will be such.

But, you say that is what we always do. Do you? If so, you are very fortunate indeed, but experience does not bear this out too well. You may also comment and say what is there about preplanning that is not covered in the above. Let us see.

When everything has been adjusted and the replanning completed, we come to a fork in the road of progress. One road, a very short one, leads in the direction of completing the plans, detailing, writing specifications, etc; the other fork leads to the submission of the preliminary plans to individuals who constantly deal with school building plans and know the ins and outs of school administration, for suggestions and criticisms (constructive of course) in order to get another viewpoint than the local one — and here is the deviation from the usual practice; it extends our preplanning term to include this feature and thus makes planning a totally comprehensive and complete one. The reader will probably now recognize the reasons for this conception of the term; it is to prevent the ingrown attitude, the rationalization of the local ideas to which we are all subject. Familiarity does not breed contempt here but is apt to restrict the planning vision. "We have dealt with our plan so long and have made so many changes that surely it is now letter perfect," was the response made to the writer when a plan was submitted in accordance with the above in mind, but — it was a changed plan when we completed our study of it.

Of course, opinions expressed, changes suggested, new ideas exploited and clarified, all will slow down our travel rate on this secondary road, but eventually we shall regain the time lost and ultimately benefit by our deviation and make ready for the final planning steps.

A Plan Discussed

And that brings us to the nub of the situation, a demonstration of how the latter phase of the matters discussed may develop in practice. The means is a preliminary plan submitted and which may serve as an illustration. We will approach the matter from all angles — educational effectiveness, desirability, need, modernity, etc., but will omit financial considerations, at least so far as possible. Any modifications of the suggestions made due to financial restrictions or definite local reasons must be made *in situ* of course, but such will not enter into this discussion which will deal with the plan only.

We have before us the preliminary plan for a proposed high school which is to replace one destroyed by fire some time ago. The building is a "functionally" designed structure, as expressed locally. "A careful study has been made of the educational needs of the community and the building itself has been [designed] constructed to fit these needs." Let us hope so, but we cannot go so far as to consider this, "a trend in new design." We take it that even in the past many school buildings have been designed with this in mind. We will also take for granted that all the factors mentioned previously have been basic to the planning. We also hope that the criticisms made hereafter will leave no sting, as they are intended to be helpful — build up, not destroy.

The school is to serve about 320 students. It is to be a two-story structure with one section devoted to the academic work, one wing for a gymnasium and "activity program" and the third for an auditorium. To judge by the space allotments the school will offer its student body a well-rounded-out curriculum. We concede the latter, and base further statements upon this fact. We have no further information than expressed in the previous paragraphs.

Size of Special Rooms

1. There are 14 areas which are devoted to an academic and activity program, not including the gymnasium and library. If we concede a median class size of 20, a six one-hour-period day and a five-period daily student program, we get a capacity of 336; if the school operates on a seven-period day and students are not specifically occupied in classwork, etc., for five periods, then the capacity will easily approach 400 or more, especially if the median class enrollment should be in excess of 20. There is plenty of room.

2. Classroom sizes as a whole are satisfactory and in keeping with the enrollment. However, the stage or platform in the English room will be found rather shallow if used, as is frequently the case, for light dramatic work. The total length of this room may be increased to 50 feet, thus giving the platform a 15 foot depth.

3. The library is none too large especially if it is to serve the community as well. In a school of this size a workroom for the librarian becomes a necessity.

4. The "visual aid" room is too small. Here we are confronted with a principle: Is it a logical policy to use a regular classroom for projection work when the need arises in connection with the classwork or wait for an opportunity to transfer the youngsters to another room and "put on a show"? The matter of transfer of interest and using a belated time period for presenting visual aids involves a question in psychology which should be carefully studied in this connection. The writer is committed to the principle that when the time is ripe, present the related material. However, there are differences of opinion — but not about the size of the room involved.

5. Student toilet rooms and fixtures as indicated are sufficient for the building capacity. But the janitors' room on the second floor is certainly too small. As it is, we usually give the poor fellow what is left over. He is entitled to a good room and his work is apt to be reflected in the measure in which we treat him; so give him an ample work and storage room.

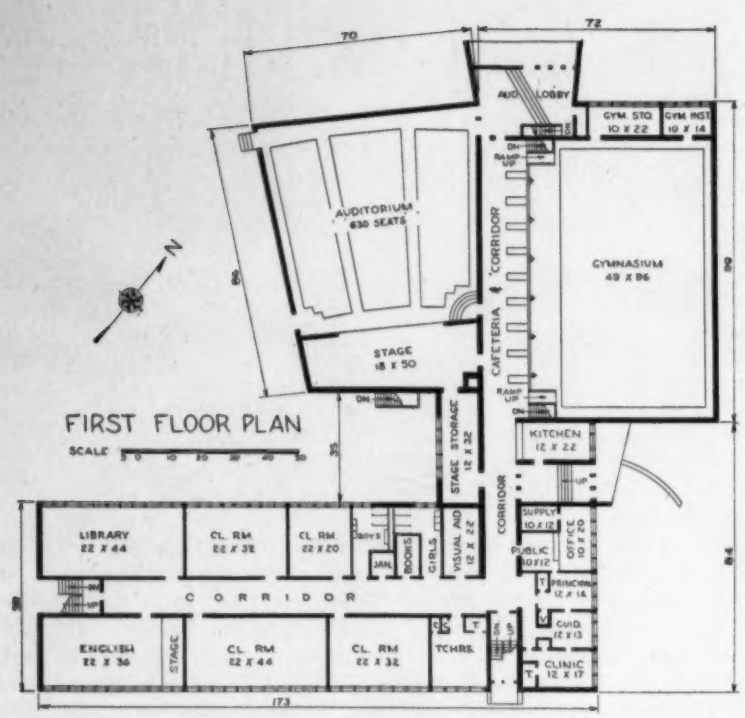
6. A bookroom wedged in with the toilet rooms seems incongruous to say the least. This space, too small, by the way, had better be connected with the library or the administrative suite and made more readily accessible.

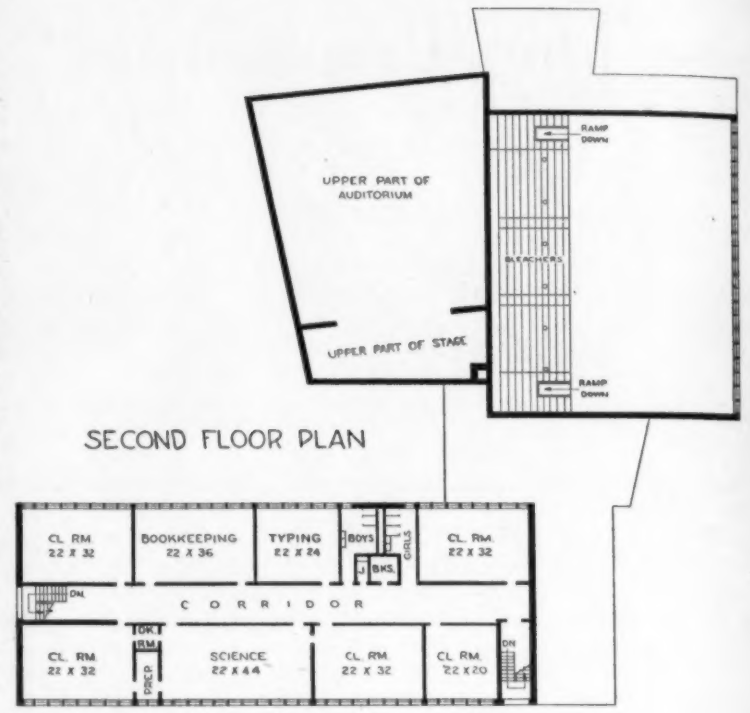
7. The quarters for administration are satisfactory as a whole, but the principal may find his room rather small when he has conferences with parents, students, etc. By the time his equipment is in place there won't be much free space left. The vault should open from the office space, otherwise there will be constant running about.

8. The home-economics room is below grade in part, but the plans are not well outlined here. According to elevations, the shop, kitchen, storage room, and the home-economics suite are on the same level. This gives ceiling heights of about 9 ft., 8 in. which would be considered low.

Auditorium Layout

9. The auditorium layout is somewhat peculiar due to its skewed planning. Consequently the stage is likewise skewed, varying from 15 ft. on one side to 18 ft. 6 in. on the other (scaled). We suggest that the angularity be eliminated and the depth increased to at least 20 ft. This can readily be done. Here again, field "kicks" about stages being too





shallow are presented as a reinforcing argument. The stage storage room should have an outside door. Where are the dressing rooms?

There does not seem to be much reason for carrying the auditorium design to the point that the foyer and steps are likewise angular. Maybe there is a reason for this, outside of design, but we have not been able to advance one. The ticket office at the head of the basement stairs is not well located; it may prove a hazard. The wind-tunnel effect of the entrance from the northeast will probably be rather cold in winter. Any reason why this cannot be changed to an easterly entrance?

10. We fail to find any provisions for instrumental or vocal music — now considered a definite part of a good curriculum. The stage may be used for this purpose by providing windows in the rear walls and folding doors to cut off this space from the auditorium. This space can then be heated and ventilated separately from the auditorium itself. Of course a separate space is to be preferred.

11. While we are talking about music, where is the art work to be done or is this to be omitted? It is usually conceded to have as much value as the music subjects and worthy of good quarters.

12. The cafeteria kitchen will be found altogether too small. Here also we get complaints about cramped quarters. As a cook once said, "I'll have to reduce 50 pounds before I can move around this place." And the storage space for supplies is on the floor below! No access except by a stairway around a corner of the hallway. Here the term poor is justified. If the space cannot be rearranged adjacent to the kitchen, an elevator may be used as a case of last resort.

13. Using a corridor for a cafeteria may be defensible as an economy measure (even though we agreed not to mention finances); but that would seem to be the only reason. It is 80 ft. or more from the farthest table to the serving counter. How about serving traffic? We can also be sure that this space will be used as a corridor during the day; sanitary considerations should govern here.

14. The tool and stock room off the shop will be found small; likewise the space above it. Why all the windows in these spaces?

The Lockers and Showers

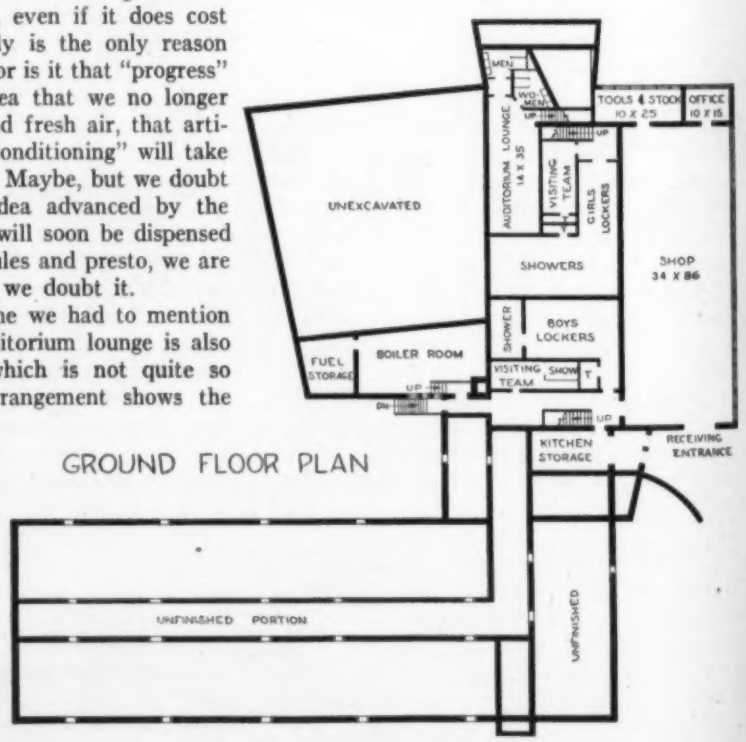
15. We just cannot see all those locker, shower rooms, toilets, etc., below grade to the extent that none is open to air and heaven sent sunshine. If any spaces are in need of good sanitation, it must be admitted that these are the ones entitled to it. A change here is definitely recommended, even if it does cost money, which apparently is the only reason which can be advanced, or is it that "progress" here is dictating the idea that we no longer need natural lighting and fresh air, that artificial lighting and "air conditioning" will take the place of the former. Maybe, but we doubt it. It seems like the idea advanced by the superidealist that food will soon be dispensed in small tablets or capsules and presto, we are fed. Again, maybe, but we doubt it.

That's the second time we had to mention costs perforce. The auditorium lounge is also a part of this area, which is not quite so bad; but the toilet arrangement shows the entrance doors virtually adjacent. A change here can readily be made.

16. It will also be noted that all of the 630 gymnasium spectators have to pass on to the gym floor before entering the bleachers. Would that be considered a good feature? The two ramps would have a rise of 3 in 8, surely not a comfortable one.

17. We understand this building will serve as a community center which in turn presupposes spaces for small banquets and gatherings of 50 to 100 or more people who should be accommodated in suitable quarters. Is it the intention to use the English room or home-economics laboratories or other spaces for these meetings? At any rate this idea should be borne in mind when planning. Or has it? If so, what is the solution?

18. The "youth movement," partly brought about by the war, is gaining impetus which in turn demands that the school give over some space which these youngsters may call their



own. They foster hobby clubs, group meetings, journalistic work, and a multitude of other activities. What space is there for this purpose? We have a "conference" room, 16 by 22 ft., which may of course be intended for the above; if so, it will be found inadequate. Give the youngster a break!

19. We note that provisions for storage are inadequate. There are a "stage storage" room, a book storage, and a supply room off the administrative suite. But experience shows that these all fall short of providing sufficient space. Yes, we know, "that we will have plenty of space and we do not intend to have a lot of junk accumulate." That argument does not hold in the long run. Better be safe than sorry in this respect.

The Element of Cost

The reader may look upon these statements as covering a lot of ground and entailing a good many criticisms. That is true — but are any of the latter invalid? It is also to be remembered that the plans submitted are quite sketchy and do not contain any details. It is quite possible that the latter will present features which are also open to suggestion. Will acoustical treatment be had for auditorium, gymnasium, corridors, shops, library, etc.? How about fenestration, floor coverings, lighting, heating, ventilation, etc.? These are all important items and will influence the efficiency as well as the permanence of the structure as well as the cost. Have we gone too far in this preplanning matter? This may be a matter of opinion and the reader may judge for himself — we have no axes to grind.

We stated at the outset that financial considerations would not intrude themselves except as the plans reflected this. We had to mention this matter on two occasions however. But a few specific comments in this direction may now be in order. It was noted that the original plan has been cut so as to reduce the size of the building and revised plans were used for this analysis. And by the way, most of the suggestions made herein would also apply to the original layout. It is, therefore, evident that cost *does* enter into the discussion. Consequently some of the suggestions made and implied may have to be discarded or modified; but it does not follow these are baseless per se.

On the other hand we have been confronted altogether too frequently by such statements, even in terms of accusation, as, "If we had only been aware or known of many features which, in practice, have proved unsatisfactory, or omitted in the planning, we might have made some changes." So we have given the plans the benefit of our analysis and offer neither alibis nor objections to countercriticisms. But we do believe that this matter of preplanning, as exemplified here, pays, we hope, and shows how all interested agencies can help by passing opinions upon and making suggestions for the improvement of school building plans. It is also hoped such criticisms will be received in the co-operative spirit intended.

In closing, we would like to make a few remarks anent the cost of this structure. We worked out the cubic foot contents of the building as closely as possible from the plans submitted and used prevailing construction costs for the various areas involved. This worked out as $309,000. We also checked by using the median per pupil cost for such a school according to a recent study reported in the SCHOOL BOARD JOURNAL, January, 1946. This figure, $900 for the section of the country involved, gave us the cost as $306,000, virtually identical with the first estimate. We now need to add 6 per cent for architects' fees and 14 per cent for equipment, and we get a total over-all cost estimate of $360,800 at present writing.

From information furnished, the total amount available including nearly one third to be raised by popular subscription and donations is $300,000, in our opinion a sum insufficient to erect even the present curtailed structure. So compromises are in order. What they should be is a matter of local concern. At any rate we have told our story.

It may be mentioned here that the financial picture may not be as gloomy as outlined. If Congress ever takes any action on H.R. 4499, a federal construction aid bill, a very material sum, up to 50 per cent of the cost of construction may be available for this project, thus making possible a building more nearly ideal. Where there is hope there is life!

The Superintendent's Reply

J. Weldon Russell

It was with great interest and pleasure that I read your criticism of the proposed new high school. Many of your criticisms have been of great value while others, although just and accurate, had been previously considered and because of reasons beyond our control were left as they were.

Before planning this building, many people were consulted, including teachers, the school board, laymen in the community, national organizations, and others. In addition, many schools in New England were visited where ideas were garnered from the mistakes and the good points made by the architects of these buildings.

From the original plans we have made many changes and, no doubt, even though we are at present under construction, will make many more. We fully realize that after the building has been constructed there will be mistakes.

You have approached this problem from all angles such as educational effectiveness, desirability, need, modernity but you have omitted one thing, financial consideration, which to the architect and the community were of paramount importance. The majority of the failings on the part of the architect, to fulfill all the needs of an effective school program through a properly designed building, were the result of the lack of funds.

You agree that the building is of proper size to give the student body a well-rounded-out curriculum which was satisfying to us to say the least. Your criticism of the stage in the English room as being too shallow we accept graciously. As a result of your criticism we are going to omit this stage, and probably put in a small speaking platform and carry on all dramatic work in the auditorium.

Your next criticism concerns the library. You assumed that this library was to serve the community which is not the case. We have a very fine community library and therefore the school library will serve only the school pupils from grades nine to twelve. I cannot agree with you that a school library of this size requires a workroom. There is no reason why the librarian cannot use one of the tables right in the library to do the small amount of work that will be necessary to keep this library in order. We probably will only be able to spend for new books and materials $1 per pupil, or $300 per year. With this small budget I cannot see that a library workroom will be a necessity.

The visual aid room you state is entirely too small. I ask, too small for what? It is to be our policy to use this room for storage of visual aids only with a table in the center, wired so that our machines can be set up easily and our materials viewed upon a screen in the room. This will be for the teacher's use only. All visual aids will be shown directly in the classroom. With this policy in mind, I contend that the space allotted for storage of visual aids is in keeping with the amount of money we have to spend for visual aids space.

Your criticism of the space allotted to janitors is well taken and as a result of your criticism we have "stolen" a little space out of the toilet room by moving one fixture. We also agree with you with regard to the incongruousness of space we are allowing for book storage. This was considered very carefully and in our original plans more space was allotted. However, once again, without lengthening the building, it was impossible to get this storage so we have to get along with what is available and use a basement storage room for the slow-moving books.

Yes, we will agree the principal's office in the administration room is rather small. Once again because of finances, we had to redesign this space. On the original design the principal's office was approximately twice the size as that shown.

The home-economics room is located slightly below grade and with a fairly low ceiling height, but here again, in order to save money and to fit our building to the terrain it was necessary to design this room a little bit toward the undesirable. However, we feel that there will be plenty of light and ventilation and we have not seriously moved very far from the most desirable.

I was very much interested in your comment concerning the layout of the auditorium. I am surprised you did not recognize that the skewed planning was made with added seating, low cost, and good view in mind and also better acoustics. We still feel this type of planning is worth while.

Your idea of shutting off the stage to be used for instrumental and vocal music is good in that we do not have to heat the whole

auditorium as was our original plan. No doubt we will incorporate this into our final plans.

Yes, we would like to have art in our school but to date it has never been put into the curriculum and due to the high budget for operating cost of the school, the community has not been sold on the idea as yet. We would like to include an art room but now we are back to inadequate finances again.

With regard to the cafeteria-kitchen I guess we will just have to hire a cook weighing no more than 110 pounds and try to get along with the space allotted. We only plan to serve 60 to 80 pupils so we feel this kitchen space is adequate. The corridor-cafeteria idea is a tremendous saving in money over and above what it would cost to build a separate room.

We will now go down into the shop in which you say the stock and toolrooms are too small. Agreed. Our plans for the future on this are to build into our main shop, as our program develops, more space to take care of this need. When this is done the stockroom will probably be a paint shop, and the toolroom will be for small tools only.

Yes, we would like to have the locker room and shower room above grade, with plenty of heaven-sent sunshine and light, but it does cost money which is the only reason we can advance for putting this poor feature into our building.

No, it is not a good feature to have our spectators pass onto the gymnasium floor, but as it is only for a short distance we considered it would do no particular harm. In other words, we would not want to cut down our space in the bleachers by having the spectators go directly into them. If we did this there would be a sharp turn which would create a hazard, and we feel that it would be better to allow the crowd to flow out onto the floor and then gradually feed out of the building. I believe you will agree with this line of thought.

Yes, the building will be used as a community center as much as possible and we plan that the community will use the auditorium for their gatherings of over fifty, and use the classrooms for smaller gatherings. Separate rooms for such rooms could not be fitted into our finances.

The conference room is the only special room to which the pupils can go to have their meetings and carry on extracurricular activities. However, we feel the classrooms with movable seats can act in a dual capacity, rather than adding rooms which are only used occasionally. Obviously, we would like more space but by now you should be able to sympathize with us.

We wish to thank you very kindly for the time and patience you have put into your preplanning study of our building and assure you that we appreciate it, and take all that you have said in good faith.

Doing Over the Gym Floor

Dave E. Smalley[1]

Although most schools refinished or repaired their gymnasium floors during the summer, a few will have waited for the Christmas holiday period. Especially will this period be utilized for repairs.

Most of the information to follow will not be new to experienced schoolmen, but a lot of new people have recently entered the field and to these a few pointers regarding the treatment and maintenance of the gymnasium floor should be useful. No other floor in the building is quite as important and no other floor demands such discerning care or is more sensitive to abuse.

"Doing over the gym floor" can mean any process from sanding and complete refinishing to just a general cleaning, and therefore we shall discuss the subject in several stages which should cover almost any project contemplated for the holiday season.

Complete Refinishing

First, the complete refinishing can be disposed of quickly. The floor is to be sanded to a new wood appearance. It is then sealed with a prime coat of a good sealer which should be done at a room temperature of not less than 70°F. Often this "primer" is simply the finishing seal thinned down with the proper solvent and applied with a lamb's-wool applicator. It is designed for deeper penetration and consequently better anchorage for the successive coats.

Sometimes this prime coat raises the grain on a freshly sanded floor, in which case the surface should be smoothed down with steel wool under a floor machine. Use a steel wool pad of No. 1 grade for this purpose. A simple and satisfactory way is to place the wool pad under a stiff scrub brush. Some use a steel wire brush, but in such cases great care must be taken to prevent serious scratches on the floor.

A second coat of primer is necessary only on very porous floors where the first coat virtually disappears.

Allow not less than 12 hours for the prime coat to dry before steel wooling. After which remove the dust with a "tack mop." The latter is an ordinary mop, of either the dusting or water mopping type, which has been dipped into a pan of naphtha containing about 5 per cent varnish — preferably the slower drying sealer type. This gives the mop a slight tackiness that is very effective for removing the dust left from sanding or steel wooling.

A coat of the regular seal or "gym finish" is then also applied with a lamb's-wool applicator. The phenolic (Bakelite type) seals are preferred because of their greater toughness. Lamb's-wool pads, between application periods, should be kept in sealed fruit jars to prevent their drying to an unusable stiffness.

Allow 12 hours for the seal to dry. Seals drying in less time are likely to be brittle — suitable enough for woodwork, decks, etc., but not tough enough for floors. Conversely, the good slow-drying floor seals may always be sticky on seats where the warm human body is a factor.

Three Coats of Finish Needed

On a newly sanded gymnasium floor, at least one coat of primer and two coats of the finishing seal are necessary for a good job. If there are dull spots after the third coat is dry, another coat should be applied. The markings should be applied over the primer.

Although all manufacturers do not recommend it, maximum results are obtained by steel wooling each coat of primer and seal, including the last coat. A better bond between coats is obtained thereby, and if the final coat is steel wooled you avoid many of the mars and dull spots which appear later from usage. Even with the best seals, the gloss is more or less superficial, a sort of very thin but brittle crust that soon succumbs to friction. It looks pretty while it is new, but since it does not wear off uniformly, it shows unsightly signs of wear in time. By removing this brittle film with steel wool in the beginning a rather glaring short-lived gloss is exchanged for a smooth, satinlike sheen of much greater permanence.

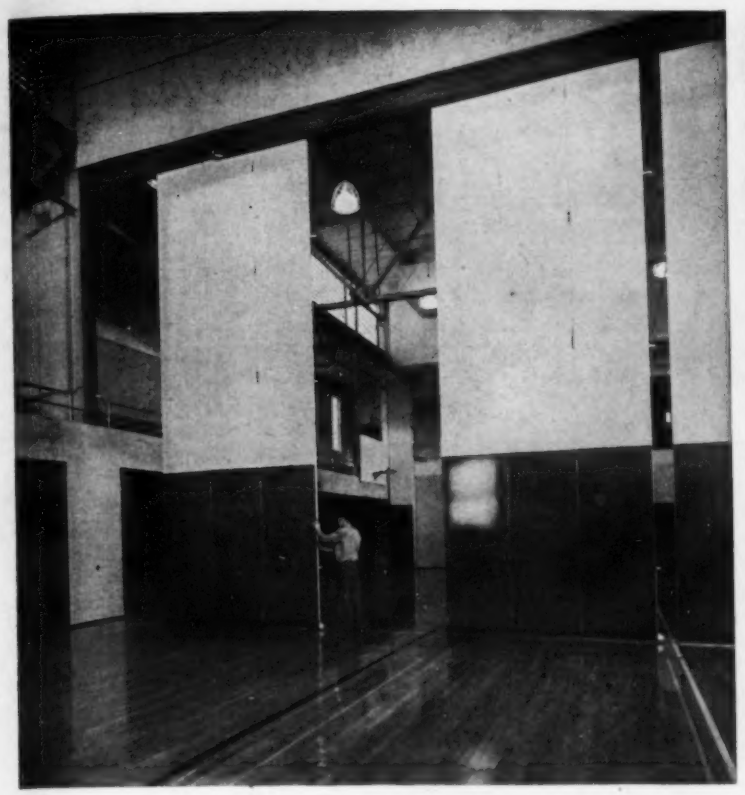
Since most schools will not be interested in the complete refinishing of the gymnasium at this time of the year, it may be well to consider the matter of rejuvenating the present finish.

Removing Shoe Marks and Burns

If fresh seal were applied during the preceding summer, it is likely that portions of the above-mentioned supergloss will have succumbed to the fall activities. It is also very probable that the carbon-filled soles of athletic shoes will have left their markings. In such cases it is advisable to first remove the markings with preparations made especially for the purpose or, if none is available, a mixture of gasoline and kerosene — about equal parts. If readily obtainable, add carbon tetrachloride to reduce the fire hazard and also increase the efficiency of the cleaning mixture. The ideal mixture would be these three ingredients in equal proportions. Usually the mixture serves satisfactorily when rubbed on with a mop, but in some cases a scrubbing machine may be necessary. Follow immediately with dry mops to remove the dissolved carbon.

If none of the recommended mixtures remove the marks, then the floor has the popu-

[1]Editor, "Floor Craft" Brazil, Ind.



The Gym Floor can be kept attractive, useful in the highest degree, and safe if properly maintained.

larly called "rubber burns." All markings from athletic shoes are commonly called "rubber burns" but the term is often incorrectly used. "Burns" are embedded markings —they have penetrated the surface of the seal, either because the seal itself is of poor quality or because the floor was put into use before the seal was thoroughly seasoned.

There is no way to remove actual burns satisfactorily except to resand the floor. If, however, the burns are few and far between, repairs are possible. Remove the burns by hand sanding and then patch the spots with fresh seal, taking care to "feather out" the edges of the patch.

After the carbon markings have been removed, the worn spots can be fairly well nullified by steel wooling the entire floor, removing the rest of the gloss which makes the worn places conspicuous. Where this job is done, the floor may be satisfactorily ready for the winter's activities.

If, however, it is desired to apply a fresh coat of seal, this is a good time to do it. But first be sure the surface is free from dust or wax. The dust left from steel wooling can be removed with the "tack mop" described earlier in this article.

Wax on Gym Floors

Wax is seldom used any more as a dressing or finish for gymnasium floors, but only a few days ago a *Journal* reader brought up the question. He said his suppliers were divided upon the idea, one group recommending a top coat of wax over the sealed floor, while the other "school of thought" argued against it.

There have been cases in the past where solvent-type floor waxes, containing some varnish, served satisfactorily on gymnasium floors but not, to this writer's knowledge, over a seal. The treatment was used on the raw wood floor.

Generally waxes are a nuisance, if not a hazard, on a gymnasium floor. The home team may become accustomed to the wax on their own floor, but it is a decided disadvantage to the visitors and does not promote fair play. It is this writer's recommendation that wax in any form be barred from a gymnasium floor, and this includes dance wax. If the gymnasium is used for dancing purposes, boric acid spangles are an ideal substitute for wax, and since they are soluble in water they can be readily removed by mopping after the dance.

Patching Worn Spots

If there are badly worn spots on the floor, these can fairly well be eliminated by careful patching. Go over the worn spot with the seal, applying it with a paint brush and "feathering out" the edges to avoid a lap. When dry, steel wool at least the edges of the patch and then go over the entire floor with the seal. Then, when this coat is entirely dry, and providing there is a willingness to dispense with the temporarily attractive gloss, steel wool the whole floor.

In the above an attempt is made to cover a lot of ground in a limited space, but it is hoped that enough has been told to impart the general idea. People already familiar with the care of gymnasium floors need only reminders or suggestions, and for those who are wholly inexperienced no printed instructions will serve more than a limited service. Only experience can teach them adequately.

But there is one injunction from which both experienced and inexperienced can profit: *Use good materials*. They are easier for the experienced to use and safer for the inexperienced.

Use No Wax

If wax in any form has been used on a gymnasium floor, it must be completely removed before applying another coat of seal or the latter will not adhere. Solvent waxes (including powdered dance wax) can be removed with steel wool and the gasoline-kerosene mixture recommended above, though soap and water should follow to remove the residue of the kerosene.

If a water wax has been used, a fine abrasive cleaner will be needed, or ordinary soap suds can be used with pumice stone sprinkled over the wetted surface, scrubbing thoroughly and mopping up the solution promptly. Then rinse and let the floor dry.

SIX QUALIFICATIONS OF A SCHOOL BOARD MEMBER

Six qualities which characterize a good school board member: (1) he puts the interests of the community above his own personal interests; (2) he is open-minded and decides questions on their merits rather than by prejudgment; (3) he is co-operative in community activities rather than stubborn; (4) he respects ability in others and accepts the fruits of scholarship in preference to mere opinions supported only by custom; (5) he is willing to accept the responsibilities of school board membership and is committed to make the sacrifices which are required in discharging this public trust; and (6) when confronted with major issues, he puts the welfare of children first regardless of personal or social obligations. —*William C. Reavis.*

How Federal Works Agency Can Help School Boards Formulate Broad Public Works Program

George H. Field[1]

During the war it came to be widely recognized that a reserve of state and local public works, fully planned and ready for postwar construction as soon as needed, would be of great value in stabilizing the construction industry and helping to maintain a high level of employment. But it was found that very little was being done by state and local governments in making plan preparations for their postwar public works. It was evident that federal stimulus would be necessary if such a reserve was to be created. Congress, therefore, in Title V of the War Mobilization and Reconversion Act of 1944, authorized a program of federal advances to state and local governments to assist them in financing the plan preparation of their public works. This program is administered by the Bureau of Community Facilities.

Three appropriations have been made for this program: the first, of $17,500,000, in May, 1945; the second, of $12,500,000, in December, 1945; and the third, of $35,000,000, in June, 1946 — making a total of $65,000,000.

The results of the program, thus far, in over-all terms, are these. Through August, 1946, planning advances have been approved in a total amount of $32,258,000. These advances will make possible the planning of state and local public works with an estimated total cost of $1,297,000,000.

The types of projects for which planning advances are made include: local highways and streets; bridges, viaducts, and grade separations; airports, terminals, and landing strips; sewer, water, and sanitation facilities; *schools and other educational facilities;* hospitals and health facilities; other public buildings; parks and other recreational facilities; and miscellaneous public facilities.

Any nonfederal public agency which is authorized to construct public works is eligible to receive planning advances. These include state governments; counties; cities, towns and townships; *school districts;* and water and other special districts.

Advances are made only for the planning of specific projects. No advances are made for general or over-all planning. Applications for advances are submitted to the division offices of the Bureau of Community Facilities. The applications are carefully examined by the staffs of the division offices, and are sent to the central office in Washington with recommendations for approval or disapproval. Final action is taken by the central office.

When an application has been approved, an initial payment of half the agreed advance is made to the applicant; and final payment is made when the plan is completed.

Over-All Planning Needed

That in broad outline is how the program operates. It will be clear, however, that the first steps in formulating a local public works program are entirely the responsibility of the local government. It is up to the local officials to decide just which projects they wish to have brought to the fully completed stage of planning. In this connection I should like to stress the advisability of each municipality's having an over-all plan for future public works, with realistic arrangements for financing their construction.

Not many communities, as yet, have a definitely formulated and legally approved over-all plan. But every community has at least an over-all idea about its future public works. In either case, the Bureau can be of assistance in bringing parts of this general plan or idea into the practical stage of blueprints and specifications.

The need for local public works, now and for some time to come, will be great in practically every community. And important decisions must be made as to which public works should come first in construction and which should be postponed. The responsible local officials may know exactly what public works the community most needs and the order in which their construction can be most conveniently financed; or this may be a question that can be clarified to a greater extent in their own minds by discussion with the field representatives of the Bureau.

The existence of a definite over-all plan will aid the community in getting its money's worth in public works, and in securing an orderly development of its public facilities in line with the community's growth and needs. An over-all plan will also be helpful to the Bureau in the conduct of its program, for it will give us the information we need in selecting projects for planning aid. Under the legislation governing this program, projects to be planned with the aid of federal advances must conform to an over-all state, local, or regional plan approved by competent authority, where such over-all plan exists; and where no such plan exists, the public works to be planned must have the approval of the authority having jurisdiction over such types of public works.

The Bureau endeavors to make sure that advances are approved only for public works that the applicants can construct and intend to construct within the next few years. Applicants are asked to give data showing how the construction of the proposed work is to be financed; and no application is approved until the site has been selected.

Funds Insufficient for All Works

Just as the community has to choose among many desirable public works because of financial limitations, so the Bureau has to choose among applications for the same reason. The funds available are limited in the amount available for advances in each state. The authorizing legislation directs that 90 per cent of the funds available for advances be apportioned among the states in accordance with their population; the remaining 10 per cent is apportioned at the discretion of the federal works administrator. The Bureau also undertakes to spread the funds available for each state as widely and fairly as possible, with attention to the needs of the smaller communities.

Working together, the local officials and the field representatives of the Bureau can help to implement a community's long-term program with blueprints and specifications for particular projects, and at the same time add to the reserve which the Bureau has the responsibility for building up all over the country.

There are 2174 public bodies scattered throughout the country that are now making plan preparations for public works with the aid of advances under this program. These public bodies include 1524 cities, towns, and townships. The other governmental bodies cooperating in the program are 27 state governments, 182 counties, 403 *school districts*, and 37 special districts.

During most of the period of its operations, the Bureau has had more applications than it could approve. However, the new appropriation of $35,000,000, made late in June, will enable the Bureau to approve many of the applications under review, and many new ones. The total amount available for further planning advances at the end of August, 1946, was $30,659,000.

Planning Should Not be Delayed

I should like to repeat that the adoption of an over-all plan by municipalities is always desirable, and the setting up of a realistic long-range program is good, sound common sense. These preliminaries are not, of course, a prerequisite to co-operation with the Bureau. But it is obvious that the Bureau's possible contribution to any public works program can begin only after the citizens and officials have made up their minds what public works they want and will be financially able to construct.

And now may I urge you, in behalf of the Federal Government, not to delay making plan preparations for the public works that you know you want and that you intend to construct within the next few years.

Available evidence now points to a great volume of state and local construction, beginning next summer and continuing for some years. As materials and labor become available, long deferred projects and projects needed in connection with the veterans' housing program will get under way. We hope that no emergency will arise in which employment needs other than construction needs will be the crucial factor in determining the volume of public construction; but in any case, state and local governments should be well prepared in advance to provide their due quota of construction employment.

The return of our veterans to their home communities is bound to have an influence on the policies of local governments in regard to public works. These veterans have ideas about the kind of place they want to live in; they definitely do not want to live in a dismal, unsanitary, and backward community environment. They will be interested in better schools, hospitals, libraries, roads, parks, water supplies, and sewer systems. This widespread veteran attitude will be an increasing challenge to the enterprise and resourcefulness of public works officials. While our towns and cities are not as rich as some people suppose, they have come out of the war with improved financial capacities. They must make every effort to provide needed community facilities at the earliest practicable moment.

[1]Commissioner of the Bureau of Community Facilities, Federal Works Agency, Washington, D. C. Abstract of an address.

The Teacher Shortage Problem

A CAUSE OF WORRY

S. P. Nanninga[1]

The teacher shortage is again causing considerable worry to school administrators to a much greater degree than at the end of World War I. It seems that, after every war, or when times are good and people are generally employed, the teachers' economic status falls below that of gainfully employed people in other vocations. When times are bad, and depressions are upon us, the teacher's income is usually above that of other workers in the skilled vocations. That has been the case for a number of decades.

We can be assured that this time we are in for a longer period of teacher shortages than any time during this century. In order to attract and hold teachers in the profession, it would seem that salaries, first of all, would have to be increased and the financial status of the teachers improved. Second, teachers must be regarded as normal individuals, and controls which some communities place on them in regard to their social life and general behavior should be removed. I think it behooves board members and others engaged in administration to be friendly and considerate of the teacher's problems. We must make their life as agreeable as we can.

In order to attract students to the profession, we have sent out an attractive pamphlet to all of the high school seniors, telling them of the present need of teachers, people who should teach, opportunities of the teaching profession, and the rewards. We hope to attract more and better talent from the high school graduating classes.

[1]Dean, College of Education, University of New Mexico, Albuquerque, N. M.

THE ROLE OF BOARDS OF EDUCATION AND SCHOOL ADMINISTRATORS IN SECURING AND HOLDING GOOD TEACHERS

Harry P. Smith[1]

Boards of education and their executives must make every possible effort to assure both the teacher-in-service and the young person thinking of teaching as a career social and professional status comparable with that of other professions. While social status is primarily a community obligation, yet the leadership represented by the board of education and its executive can go far toward improving the attitude of many a community in this regard. On the professional side, the board and its executive should consider the teacher to be a thoroughly trained professional worker in his own right and so organize the school system that the professional knowledge and skill of the teacher may be utilized on a democratic basis to the fullest extent. Without such status young men and women may hesitate seriously to select teaching as a life career.

Boards of education must make every effort to secure for the teacher and prospective teacher compensation comparable to that received by other professional groups having equivalent training. This compensation should guarantee a living wage at the outset, with increments sufficiently large and numerous that the teacher may advance to a saving wage, and later to a cultural wage.

[1]Professor of Education, Syracuse University, Syracuse, N. Y.

THE PROBLEM OF TEACHER SUPPLY

C. W. Bemer[1]

In my judgment, there are two reasons why the present supply is inadequate and bids fair to remain that way for some years to come.

1. The general apathy of people toward public education has caused salaries to remain at a level which cannot compete with those found in business and industry.

2. So much unfavorable publicity has appeared with respect to the salary situation that the general public, and youth in particular, has come to the false conclusion that teaching represents a profession which offers no opportunities for a decent livelihood.

A person who is constantly talking about his aches and pains quickly becomes a bore and one whom people shun. What we need is a positive approach to the problem. There must be some way in which public education can be sold in a positive manner to the American people, to the end that it will not only appreciate but support a decent educational program.

[1]Superintendent of Schools, Muskegon, Mich.

A PROGRAM OF INTERPRETATION NECESSARY

C. A. Pugsley[1]

Veterans who have given up their former intention to become teachers give me the following as their reasons for changes in their life plans.

1. The teacher has too little take home pay.

2. The teacher has too much take home work. A program of interpretation by the school board to the community of the work involved in teaching which must take place when pupils are not in the teacher's care.

3. The teacher must listen to too much abuse from parents who are emotionally tied up with their children. A further interpretation of the teacher by the board of education to the end that the community may understand that teachers are not employees who may be slapped and abused according to individual dislike.

4. Salary upgrading as a voluntary gesture from boards of education.

[1]State Teachers College, Buffalo, N. Y.

THE TEACHER SHORTAGE

A. F. Hopper[1]

In my opinion, the most important things that school boards and executives can do to retain teachers in their jobs and to attract young people to teaching may be briefly summed up as follows:

First, do everything possible to raise the prestige of the profession. Second, raise salaries and provide a definite salary schedule that will attract the right type of people to the teaching profession.

[1]Superintendent of Schools, Plainfield, N. J.

TWO NECESSARY STEPS

Frederick A. Ashley[1]

The teacher shortage problem can never be solved unless two steps are taken by school boards.

1. Establish definite educational requirements for elementary, junior and senior high school teachers, taking into consideration local conditions.

2. Establish salary schedules commensurate with other professions requiring equivalent academic and practical preparation.

[1]Superintendent of Schools, Everett, Mass.

GOOD GENERAL MANAGEMENT OF THE SCHOOLS

S. V. Burley[1]

The following are a few rules, some of which have been used to good advantage in operating the schools of Lorain:

1. First, spend less money to erect elaborate school buildings.

2. Pay high salaries when living costs are up and also when there is a demand for labor.

3. Appoint a business manager and superintendent capable of keeping operating costs down.

4. Cut wages and operating costs, from top to bottom, during a depression.

5. Operate the schools within your means. Pay as you go and operate the schools as you would any other successful business.

6. Building during depression years.

7. Apply the cost and maintenance of one building against the other.

[1]President, Board of Education, Lorain, Ohio.

THE TEACHER PROBLEM IN RURAL AREAS

C. M. Reinoehl[1]

Many school boards in this area are finding it impossible to secure teachers for their small schools, are consolidating schools and school districts this fall, thus reducing the number of teaching positions and indirectly helping to solve the teacher-shortage problem. This procedure, spread over a wide area where schools and districts are small, does make considerable difference in the demand for teachers.

On November 5 the voters of Arkansas will decide if nearly 2000 small school districts are to be continued, or replaced by districts large enough to provide a 12-year program, and a superintendent for every child in the district. The change to 388 districts, with no fewer than 350 enumerates in each, if approved, will give promise of higher school standards and better salaries for teachers, which will attract more and better qualified teachers to the profession.

Ultimately, the only solution to the problem of adequate supply of well-qualified teachers is that of paying teachers reasonably high salaries. They must be high enough to induce those of high native ability and aptitudes for teaching to prepare themselves for classroom work, rather than for other occupations which pay more, and as a rule, much more. It will

[1]Professor of School Administration, University of Arkansas, Fayetteville, Ark.

require the combined efforts of local communities, of the states, and of the nation to make the attraction of salaries uniformly and consistently high enough everywhere to continue to have enough teachers for our public schools.

TEACHERS DESERVE APPRECIATION

Frank B. Bennett[1]

The rapid change of economic conditions in the United States, and the teacher-shortage crisis that exists, has been associated one with the other as though the first was entirely the cause of the second. This I do not believe to be the true picture. The rapid spiraling of living costs, and the rapid increase of wages for the untrained and the semitrained, and the war activity have been disrupting factors in the normal flow of teachers to teacher-training centers and teachers from the teacher-training centers into the classroom. If this were the only problem involved we could confidently expect a return to what was once called normalcy without any major adjustments.

It seems to me, however, if we are to find a solution to our problem we must go much deeper. America has for a number of years been crystallizing its demand for well-trained teachers and expert leadership in the public schools. To this end we have expected greater and more specialized training, and a higher caliber of leadership. In the long stretch of the unemployment period, it appeared that such increased standard could be met without very greatly affecting the standards of living conditions and wages for teachers. Consequently, we continued complacently on our way. Gradually, long before the war period started, fewer and fewer people were being attracted into educational training, and more and more individuals were drifting out of teaching to positions that were more attractive for one reason or another.

Careful students of the situation were predicting, as early as 1934, that shortages in the supply of teachers would be upon us before 1950. The coming of World War II and the war industries and activities materially accelerated that crisis. The danger in this situation is that the public has taken for granted the explanation that it is a war-caused crisis and seem content to await a return to normalcy rather than to face the fact that real adjustments are imperative.

My analysis of the situation is this. Although teachers can never expect their type of work to be the means of accumulating a fortune, they do have a right to expect that for the training required, the necessary talent, and for the services performed, a reasonably high standard of living, the opportunity for some travel, and certainly the means for advanced study and continued preparation. Second, if we are to attract a group of people and hold a group of people in the teaching profession of the caliber and quality we want to instruct American youth, we must be willing as a society to give them the assurance that they will not only be able to enjoy such reasonable standards of living, but also that when forced retirement is upon them, they will be adequately cared for, or will have been able to adequately take care of their own old age. Third, it seems to me that it becomes imperative that we cease to give lip service to our praise of the teacher in the public schools, but that society recognize the teachers for their true merit and their true contribution to our way of life, and therewith elevate them to one of the highest stations in our social esteem. This cannot come by empty praise. It can come only from the genuine appreciation of the teachers' contribution to our social way of living and through such tangible evidence as indicated above. When we do these three things, parents and society may wisely and properly urge youth to choose teaching as a profession and we may expect an adequate supply of choice teachers to become available to man our schools.

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SALARIES ARE TOO LOW

It is my opinion that the general shortage of teachers is due largely to the fact that the salaries paid school teachers are not commensurate with salaries offered people of similar ability by industry. The matter of the salaries of teachers, however, is receiving a lot of attention in this state, and I believe that within the next few years teachers' salaries will be raised to the point where young men and women will be attracted into the teaching profession. — *Benjamin T. Kinsey,* Chairman of School Board, Petersburg, Va.

MAINTAINING SUFFICIENT SCHOOL FIRE INSURANCE

S. C. Joyner, deputy business manager of the Los Angeles city board of education, has recently called attention to the importance of maintaining school fire insurance at a level adequate to obtain the largest measure of protection from policies presently in force. Within recent months there has been a sharp upward revision of the index figures maintained by the insurance companies, based on the increased insurable values of all the buildings and building contents. Based on these new index figures, school boards who are underinsured and who carry coinsurance, are certain to be severely penalized. Mr. Joyner recently made the following statement:

"The actual high construction costs have forced the appraisal firms to revise their former 'theoretical' figures to reflect the true costs which a district would have to pay if they repaired or rebuilt a building destroyed by fire. As a result, most districts, like most commercial concerns, find themselves considerably underinsured. A general idea of the true construction replacement costs situation can be obtained by looking at the July, 1946, figures for the Los Angeles area.

"The July, 1946, replacement factor for buildings erected in the years shown below are for classes of buildings as defined by the Board of Fire Underwriters:

Year	*Class A factor*	*Class B factor*	*Class C factor*	*Class D factor*
1926	1.785	1.755	1.824	1.842
1938	1.805	1.778	1.796	1.840
1939	1.786	1.774	1.776	1.802
1940	1.762	1.764	1.745	1.778
1941	1.659	1.668	1.662	1.693
1942	1.532	1.518	1.527	1.551
1943	1.355	1.430	1.434	1.457
1944	1.333	1.346	1.336	1.343
1945	1.216	1.219	1.219	1.225

"The foregoing table is to be read as follows: The construction replacement cost of a Class A building, built in 1926, will in July, 1946, cost 1.785 times the original cost. The figures show no comparison with index figures for any other time.

"It is to be noted that these factors are taken from the computing tables of a well-known Valuation Service of Los Angeles, and their figures showed a large difference after the O.P.A. went out in the period from June through July. The June factor for Class 'D' buildings constructed in 1938 was 1.492 as compared to July factor of 1.840, an increase of 34.8 per cent. The true construction cost has been finally recognized as distinguished from the estimated cost for materials which were often not available. Why the sudden increase? More expensive substitute materials are being used, labor is being paid more than the posted rates and is employed at overtime for all trades involved."

Mr. Joyner urges the school boards who carry coinsurance to check their values and insurance coverage. The school-business executives are warned by him to go on record in writing that additional coverage is necessary if school boards are not to be severely penalized.

NO TEACHERS' STRIKE IN BELLWOOD

In the September issue of the SCHOOL BOARD JOURNAL, in the article by Dr. Fordyce, concerning "Teachers' Unions and Labor Weapons," I noticed that the American Federation of Teachers has listed strikes in various towns and cities in the United States. Among them was included the name of Bellwood, Pa. I wish hereby to correct Dr. Fordyce's statement. There has never been a strike of teachers either in the Bellwood schools, the Antis Township Schools, or the Bellwood-Antis Joint School District. I am speaking, of course, of Bellwood, in Blair County. There is no other Bellwood Post Office listed for Pennsylvania.

The fact is that while our teachers are not well paid, even by comparison with any district in our immediate vicinity, I have not heard of any discussion or any intimation of the desire to strike.

I would consider it a definition of low professional attitude on the part of any teacher or group of teachers, who would go on strike for any reason whatever. There are other means for procuring better salary considerations. These methods are slower but more effective in the long run and certainly more professional.

I wish that the statement found in Dr. Fordyce's article were corrected. I certainly have no desire to have the name of Bellwood-Antis Joint Schools at Bellwood, Blair County, Pa., attached to the list of teachers on strike. — *George D. Weiss,* Supervising Principal, Bellwood, Pa.

Master Lists and Suggested Methods of Storage of Equipment for the Course in High School General Science

*Clarence Wilson Greene, Ph.D.**

This is the last of a series of four articles on Master Lists and Suggested Methods of Storage of Equipment for High School Courses in Science, covering chemistry, physics, biology, and general science. The article on Chemistry was published in the January and February issues of the SCHOOL BOARD JOURNAL; the article on physics, in the April and May issues; and the article on biology in the September issue.

The present master lists of equipment for general science were compiled through merging the lists of equipment recommended by four state departments of education. These lists were found to include the equipment required in the use of several of the most widely used general science textbooks and laboratory manuals.

The lists of the state departments of education were based largely upon the analysis of equipment required for use of several general science textbooks and laboratory manuals and the pooled judgments of a co-operating group of high school, college, and university instructors, and curriculum experts.

The general science master lists include the maximum number, or quantity, of each of the various items appearing on any of the merged lists. These lists include all equipment used for laboratory work or for lecture demonstrations.

The results were analyzed and organized for class groups of:

1. **20 to 24 students, inclusive;**
2. **13 to 19 students, inclusive; and**
3. **12 students or fewer.**

The complete list has been segregated in two groups: (1) chemicals, glassware, and battery materials; (2) apparatus and other materials.

I. Storage of Chemicals, Glassware, and Battery Materials

Maximum amounts of the items are listed in Column I for 20–24 students, in Column II for 13–19 students, and in Column III for classes up to 12 students.

ITEMS		I	II	III
Acid, hydrochloric, C.P., conc.		2 lb.	2 lb.	1 lb.
Acid, nitric		2 lb.	2 lb.	1 lb.
Acid, sulphuric, C.P.		2 lb.	2 lb.	1 lb.
Agar-Agar		8 oz.	8 oz.	4 oz.
Alcohol, ethel, denatured		2 qt.	2 qt.	1 pt.
Alcohol lamps, 4 oz. Alcohol lamps, 8 oz.	select	12	8	6
Alizarine paste, 20%		2 oz.	2 oz.	1 oz.
Alum, crystals		2 lb.	2 lb.	1 lb.
Aluminum sheet, B & S, No. 20		2 sq. ft.	2 sq. ft.	1 sq. ft.
Ammonium hydroxide, C.P., conc.		8 lb.	8 lb.	4 lb.
Aniline dye, congo red		2 oz.	2 oz.	1 oz.
Aniline dye, methylene blue		2 oz.	2 oz.	1 oz.
Baking soda		2 lb.	2 lb.	1 lb.
Battery, Burgess Dry, little six Battery, demonstration, Voltaic Battery, with porous cup and 13 elements Battery, student's demonstration Battery, dry cells	select	16	12	8
Battery, jars, 4" x 5" Battery, jars, 6" x 8"	select	12	8	6
Beakers, 100 c.c. Beakers, 250 c.c. Beakers, Pyrex, 400 c.c. Beakers, Pyrex, 100 c.c.	select	30	20	15
Beef extract		4 oz.	4 oz.	4 oz.
Benzene		2 pt.	2 pt.	1 pt.
Bleaching powder		1 lb.	1 lb.	12 oz.
Borax		1 lb.	1 lb.	1 lb.
Bottle, aspirator, 500 c.c. Bottle, aspirator, 4000 c.c. Bottle, gallon Bottle, narrow mouth, glass stopped, 4 oz. Bottle, tincture, 4 oz. Bottle, wide mouth, 4 oz. Bottle, wide mouth, 8 oz. Bottle, narrow mouth, 12 oz.	select	48	32	24
Cylinders, graduated up and down, 100 c.c. Cylinders, with flange, 15" x 2" Cylinders, graduated up and down, 500 c.c. Cylinders, graduated up and down, 250 c.c.	select	13	9	7
Ether		8 oz.	8 oz.	4 oz.
Evaporating dishes, porcelain, No. 00A, Coors Evaporating dishes, 75mm., porcelain	select	15	11	7
Fehling's solution A		8 oz.	8 oz.	4 oz.
Fehling's solution B		8 oz.	8 oz.	4 oz.
Flasks, Erlenmeyer, 125 c.c. Flasks, Florence, 125 c.c. Flasks, 250 c.c. Flasks, flat bottom, Pyrex, 250 c.c. Flasks, Florence, Pyrex, 250 c.c. Flasks, Erlenmeyer, Pyrex, 500 c.c. Flasks, flat bottom, Pyrex, 500 c.c. Flasks, Florence, 500 c.c. Flasks, round bottom, Pyrex, 500 c.c. Flasks, short neck, Pyrex, 500 c.c. Flasks, Florence, Pyrex, 1000 c.c.	select	44	30	22
Formaldehyde, pure		8 oz.	8 oz.	4 oz.
Funnels, 5cm. Funnels, glass, 7.5cm. Funnels, glass, 10cm. dia.	select	21	16	11
Funnel tube, thistle top, straight stem, 30cm. long		26	18	14
Gelatine, granular		8 oz.	8 oz.	4 oz.
Glass plates, 3" x 3" Glass plates, 4" x 4" Glass plates, 6" x 6", frosted	select	48	36	24
Glass stirring rods, 8" x 3/16"		6	6	6
Glass tubing, 5–7mm. Glass tubing, 6mm. Glass tubing, 10mm. Glass tubing, 12mm. Glass tubing, 25mm. Glass tubing, 50mm. Glass tubing, assorted, 5mm. and 6mm.	select	16 lb.	11 lb.	8 lb.
Glycerine		8 oz.	8 oz.	4 oz.
Granite		1 lump	1 lump	1 lump
Iodine solution in KI and water		8 oz.	8 oz.	4 oz.
Iron filings, fine		2 lb.	2 lb.	1 lb.
Kerosene		1 gal.	1 gal.	1 gal.
Lead acetate		8 oz.	8 oz.	4 oz.
Limewater		2 lb.	2 lb.	1 lb.
Litmus paper, blue (100 strips per vial)		2 vials	2 vials	1 vial
Litmus paper, red (100 strips per vial)		2 vials	2 vials	1 vial
Logwood solution		8 oz.	8 oz.	8 oz.
Magnesium carbonate powder, U.S.P.		2 lb.	2 lb.	1 lb.
Manganese dioxide, tech.		2 lb.	2 lb.	1 lb.
Magnesium silicate (French chalk)		½ lb.	½ lb.	¼ lb.
Magnesium sulphate		2 lb.	2 lb.	1 lb.
Mercury, metal, C.P.		5 lb.	5 lb.	5 lb.
Mercuric oxide		8 oz.	8 oz.	4 oz.
Mortar and pestle, No. 0		1	1	1
Naphtha		2 pt.	2 pt.	1 pt.
Pancreatin, U.S.P.		1 oz.	1 oz.	1 oz.
Pepsin, U.S.P. powder		1 oz.	1 oz.	1 oz.
Peptone		1 oz.	1 oz.	1 oz.
Petri dishes		12	8	6
Phenolphthalein, pure		1 oz.	1 oz.	1 oz.
Phosphorus, yellow sticks		1 oz.	1 oz.	1 oz.
Pneumatic trough, galvanized iron, inclined sides (will nest), 4" x 7" x 15"		1	1	1
Potassium bromide, crystals		½ lb.	½ lb.	¼ lb.
Potassium chlorate, crystals, pure		2 lb.	2 lb.	1 lb.
Potassium chloride, crystals, C.P.		2 lb.	2 lb.	1 lb.
Potassium nitrate, crystals		2 lb.	2 lb.	1 lb.
Ring stands, 5" x 8" base, with 2 rings		15	10	7
Ring stands, with 3 rings		1	1	1
Salt, with few crystals		2 lb.	2 lb.	1 lb.
Silver nitrate, C.P.		1 oz.	1 oz.	1 oz.
Soda, washing		1 pkg.	1 pkg.	1 pkg.
Sodium bicarbonate, pure		2 lb.	2 lb.	1 lb.
Sodium chloride, pure		1 lb.	1 lb.	1 lb.

*Director of Educational Research, Kewaunee Manufacturing Co., Adrian, Mich.

ITEMS		I	II	III
Sodium hydroxide, U.S.P. pellets		2 lb.	2 lb.	1 lb.
Starch, corn, lump		1 lb.	1 lb.	1 lb.
Sulphur flower, sublimed		1 lb.	1 lb.	1 lb.
Sulphur roll		1 lb.	1 lb.	1 lb.
Test tubes, 5" x ¾" soft Test tubes, 6" x ¾" dia. Test tubes, 6" x ¾" Test tubes, 6" x ¾", soft Test tubes, 8" x 1"	select	280	210	150
Test tubes brush, ¾" dia.		15	7	10
Test tubes rack, support, 13 tubes		12	8	6
Test tubes holder, wire clamp		15	10	7
Thistle tubes, Pyrex, 30cm. long		15	10	7
Vaseline		1 jar	1 jar	1 jar
Wire gauze, squares 4" x 4" or 5" x 5"		24	16	12
Zinc, metal, mossy, tech.		2 lb.	2 lb.	1 lb.
Zinc, strips, 5" x 1" or 6" x 1"		5	5	5

Of the 135 different items on the list there are only two that do not appear on either the biology lists or the chemistry lists, while about one third of the items appear on both lists. One half of the items appear on the biology lists.

In smaller high schools, in which a common laboratory is used for several or all of the laboratory courses in science and in which overlapping use will be made of equipment, the combined storage requirements will be reduced. Near the conclusion of this article suggested plans for such combined storage will be given.

Independent storage of chemicals, glassware, and battery materials on the master list for general science requires approximately 3500 sq. in., or 1200 linear inches of shelf space for Group I (20 to 24 students); 2900 sq. in., or 900 linear inches of shelf space for Group II (13 to 19 students); and 2200 sq. in., or 700 linear inches of shelf space for Group III (12 students or fewer).

Suggested Methods for Independent Storage

CASE A. Open Shelving Case with solid back and 8 adjustable shelves.

	Width	*Depth*	*Height*
Over-all dimensions	47"	12"	7'0"
Inside dimensions	44¼"	10¼"	6'5"

CASE B. Open Shelving Case with solid back and 7 adjustable shelves.

	Width	*Depth*	*Height*
Over-all dimensions	47"	16"	7'0"
Inside dimensions	44¼"	14¼"	6'9"

CASE C. Glazed Sliding Door Case with 7 adjustable shelves and lock.

	Width	*Depth*	*Height*
Over-all dimensions	46⅜"	16"	7'0"
Inside dimensions	42⅞"	11"	6'5"

When the area storage method is used, one unit of Case A, Case B, or Case C will provide the essential storage for Group I, Group II, or Group III.

When practically complete linear storage is used, three units of Case A, Case B, or Case C are required for Group I (20 to 24 students) or Group II (13 to 19 students), while two units of one of those cases will suffice for Group III (12 students or fewer).

When the linear and area storage methods are combined, two units of any of the cases described will provide adequate storage for any one of the student groups.

II. Storage of Apparatus and Other Equipment for H. S. General Science

ITEMS		I	II	III
Aquarium, aluminum, frame, 4 gals. Aquarium, balanced, with plants and animals	select	1	1	1
Air globe (for weight of air)		1	1	1
Ammeter, 10 amp., Weston Model, a.c.		1	1	1
Balance, demonstration Balance, high beam, Stirrups Balance, spring, 250 gm. and 8 oz. Balance, spring, cap. 64 oz. and 2000 gm. Balance, trip scale, Cenco, agate bearing Balance, triple beam, 600 gm. Balance, triple beam, 610 gm., sens. 0.05 gm. Balance, bakelite pan, agate bearings, no added weights needed Balance, trip, bakelite pans, cap. 2000 gm.; sens. 1 cg.	select	16	12	8
Balloons, rubber		24	16	12
Balopticon, Model B with 500 watt 115 volt Mazda lamp, with reflectors; 15 ft. of extension cord with connecting plug and switch; double slide carrier metal carrying case; and 2 5/16" dia. 12" focus lens in rack and pinion focusing mount		1	1	1
Barometer, aneroid, Metric & Eng. scales		1	1	1
Barometer, mercurial		1	1	1
Barometer, tube, 80cm. to 90cm. long		1	1	1
Barometer, tube with Hg. cup and pipette		1	1	1
Battery, Burgess Dry, little six Battery, demonstration, Voltaic with porous cup and 13 elements Battery, dry cell Battery, student's demonstration	select	16	12	8
Battery jars, 4" x 5" Battery jars, 6" x 8"	select	12	8	6
Beakers, 100 c.c. Beakers, 250 c.c. Beakers, Pyrex, 400 c.c. Beakers, Pyrex, 1000 c.c.	select	48	32	24
Bladder, pig		1	1	1
Blocks, waterproofed wood, 75mm. x 75mm. x 38mm.		6	4	2
Bulb, electric, carbon filament, 16 c.p.		1	1	1
Bulb, electric, tungsten filament, 60 watts		1	1	1
Calorimeter, 75mm. x 125mm. Calorimeter, drawn polished aluminum Calorimeter, 12.5cm. high, 7cm. dia. Calorimeter, nickel plated, 3" x 5"	select	13	9	7
Cameral Obscura (pinhole camera)		1	1	1
Can, overflow for sp. gravity		1	1	1
Candles in boxes of 12 each		2 doz.	2 doz.	1 doz.
Centrifuge, with hoop attachment		1	1	1
Chart, bird, Audubon's 26 common birds, No. 1 Chart, bird, Audubon's, 26 common birds, No. 2 Chart, bird, Audubon's, 20 winter birds Chart, Audubon's, 23 migrants Chart, biology Smallwood's set of 60 on tripod Chart, physiology, Johnston's, set of 12 on tripod Chart, Metric U. S. Bureau of Standards circulation	select	7	7 These should be hung on support or wall	7
Clamps, Burette		13	9	7
Clamps, condenser, 24cm. long		1	1	1
Clamps, lever Clamps, pinch or screw compression Clamps, ring stand, right angle Clamps, Stoddard's test tube	select	24	16	12
Clamp holder, right angle		1	1	1
Clay pipes for soap bubbles		2	2	2
Cloud forming demonstration apparatus		1	1	1
Compasses, magnetic, 1cm. dia. Compasses, magnetic, 25cm. dia. Compasses, magnetic, 3cm. dia. Compasses, magnetic, 4cm. dia.	select	18	13	10
Condenser, Liebig's glass molded rubber caps, 40cm. long Condenser, Liebig's glass, 12 jacket Condenser, straight packet, 25cm.	select	1	1	1
Convection apparatus, complete with touch paper and 2 chimneys		1	1	1
Copper strips, 5" x 1"		10	10	10
Copper strips, 4" x 1"		5	5	5
Corks, assorted, sizes 02–11, pkgs. of Corks, quality XX, assorted, 0–11 ⅜" to 1 1/16" dia., gross to pkg. Corks, straight sided, 2" long and ⅜" dia.	select	2 pkg.	2 pkg.	2 pkg.
Cork borer, set of with handles		1	1	1
Cork borer, sharpener for		1	1	1
Cover glasses, microscopic, 18mm. square Cover glasses, 22mm., No. 2	select	1 oz.	1 oz.	1 oz.
Crucible with cover, porcelain No. 1		1	1	1
Cup, nickel-plated, 12.5cm. x 7.7cm.		1	1	1
Deflagrating spoon, brass ¾" cup Deflagrating spoon, 15"	select	1	1	1
Dew Point apparatus, nickel-plated cylinder, 6cm. x 3cm.		1	1	1
Dissecting pan, black, wax lined Dissecting set, including scalpel, forceps, scissors, 2 dissecting needles, and 6" ruler in leatherette case Dissecting tools, sets of	select	12	8	6
Electrocope, metal case, new element		1	1	1
Electrolysis apparatus, battery jar type, complete with jar Electrolysis apparatus, 20cm. long with graduated sliding arms	select	1	1	1
Faucet, demonstration, Fuller type Faucet, demonstration, cut away to show parts Faucet, demonstration, compression type	select	2	2	2
File, triangular, 4" x 5"		13	9	7
File, round, 5"		1	1	1

(To be concluded in December)

Some Wartime Teaching Aids for Postwar Schools

James Benson Graves[1]

The impress of the war on American education has been important and of lasting effect on both the acceptance of new theories and new ideals and in the development of a wide variety of new or improved teaching methods, procedures, and aids. It is the purpose of this brief paper to report the findings of a limited study of army and navy teaching aids, made at Washington in direct contacts with the army and navy departments. The special teaching aids developed by the armed forces are far too numerous and have too many implications for civilian education to permit any educator to comment on more than the immediately indicated values observed, and to suggest uses and adaptations in present situations of civilian schools.

It should not be construed that the devices mentioned will change our modern education, except perhaps in tempo of learning. It would be more appropriate to say that they are an innovation on present practices. Unquestionably, these devices when properly used will greatly surpass our expectations. Certainly, never before has anything of this nature been so successfully created, developed, produced, and utilized as have these devices. It is a tested fact that students learn up to 35 per cent more in a given time and remember the facts learned 55 per cent longer by the use of these training aids.

In the writer's opinion, based on the short time allowed for this study, the more important army and navy special devices for training the members of the armed forces may be classified in five groups: (1) motion pictures, (2) film strips, (3) charts and maps, (4) mechanical devices, (5) synthetic devices, (6) language guides, and (7) models.

1. Motion Pictures

The average teacher does not make full use of the tremendous value of motion pictures available in practically all fields and on all levels of learning. It is of paramount concern that films when used be thoroughly examined before an attempt is made to project them in the classroom. A poor film, or one poorly adapted to a teaching situation, is definitely worse than no film at all. I have met teachers who have said, "Today I am showing a film on a unit of work. I won't have anything to do." Here the teacher has made an unpardonable mistake. Whenever a film is to be shown, the teacher must work cautiously and carefully. The class must understand that the film is not for entertainment purposes. A few well-chosen words will set students in the right frame of mind. Suggestions should be made as to important points to look for, and an examination or discussion after the film is shown is essential as a means of further impressing the facts and principles illustrated in the picture. It is an important maxim that films supplement the teaching process but that they can never supplant the teacher.

In the writer's experience, the manuals which accompany most films are too lengthy; the material or plan of study presented should be condensed in the presentation to the class. It would be more to the point to confine the manual to a well-organized guide and to supply an appropriate test to immediately follow the film presentation. The lastest army field manual entitled, "List of War Department Films, Filmstrips, and Recognition," can be obtained from the Superintendent of Documents, U. S. Government Printing Office, for 45 cents.

1A. Motion Picture Cameras

There are many ways in which a school can use a motion picture camera. A school fortunate enough to own one is indeed privileged. Pictures can be taken of school events as a permanent record, but more important are the taking of pictures that can be directly used for instructional purposes in the classroom. The army and navy used endless numbers of films, made in the training schools, etc., and used them immediately for teaching purposes. The schools can follow this excellent procedure in developing films for teaching manufacturing processes, social facts, etc. Thus, a school might take pictures of a local mill or factory and of the steps in the manufacture of its goods. A complete series, from the raw material through to the finished product, would have teaching values not found in many instructional films available through the usual sources.

Such a film might include pictures of pupils preparing for the visit to the manufacturing plant. Children who would see such a film would inevitably gain an understanding of the local industry that would vivify school work in terms of community life and activity.

2. Film Strips

Film strips were used for many purposes by the armed forces. In addition to the old silent films, records were made to accompany the strips, to call attention of the students to details of the pictures not readily understood by the inexperienced observers. The armed forces film strips were frequently original and even dramatic.

To the writer's mind, it would be better for teachers in civilian situations to explain the film strip with the aid of a microphone. Any time necessary can thus be devoted to the development of a topic, and the teacher can maintain complete control of the class. The audio sense, which is introduced by the record and the use of the microphone, helps to increase the speed of the learning process.

There has been developed recently an entirely new approach in presenting film strips known as the audience participation method. In a sense there is audience participation in the normal use of a film strip to the extent that the audience listens, pays attention, and rehearses the material in its own mind. However, in this new procedure the audience actually recites the material aloud and in unison, obeying the directions of the narrator. This furnishes drill on the material. The writer can furnish statistical data which substantiates the fact that this method increases the learning process 20 per cent.

3. Charts

The use of charts in the classroom has been long accepted as a means of increasing the learning process. The armed forces used charts extensively and spared no cost to make them thoroughly effective. The schools in a region might very well co-operate to determine charts needed, and to develop special "copy" to be reproduced by commercial concerns.

The schools should learn from the army that charts must be of sufficient size to be visible and readily understood by every student in a classroom. It is sometimes advisable to print supplementary information on the back of each chart for the use of students when the instructor is not in the room. So far as the instructor is concerned, I am of the opinion that he should have a knowledge of his subject matter sufficient to make reference to the reverse side of the chart unnecessary, except in the case of statistics or detailed tables.

One of the more difficult tasks in teaching is that of conveying the idea of the third dimension. To simplify this matter the army

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and navy used a blackboard globe about two feet in diameter. Space and distance conceptions are more easily understandable when this device is used. There is quite a considerable contrast between this type of map reading from that of the Mercator Projections. All schools would do well to own a globe of this type, since its use could be directly applied in social studies, science, and mathematics.

At this point the three dimensional weather maps are worthy of consideration. The Air Age is upon us and the science of meteorology will soon be a subject in our curriculum. At least the physics syllabus will be enriched with additional material covering this very important branch of the subject. These weather maps are made entirely of cardboard and portray the fundamental types of air mass and frontal activity, and help the student to visualize weather phenomena.

In connection with maps, mention should be made of the relief maps which are an excellent training aid for both younger and older children. There are available a number of pamphlets which explain how model terrain and relief maps can be made. One manual known as "Land Fall Relief Models," prepared by the United States Navy, Special Devices Division, Bureau of Aeronautics, is exceptionally well adapted for grade use. If a student, or a group of students, prepares a relief map of the local community he will learn interpretation, scale, representative fraction, enlarging contour construction methods, terrain detail, model lighting, and camouflage.

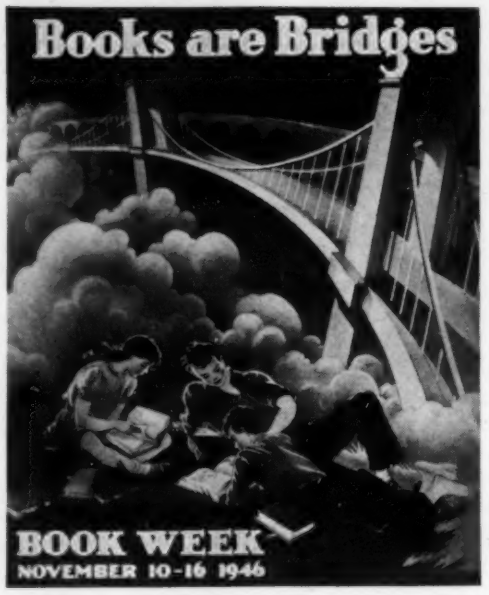
4. Mechanical Devices

The army and navy developed a device known as the automatic rater, which utilized a teaching technique of having answers made immediately available to students. The machine holds 650 cards on which questions of the multiple-choice type are asked. The examinees make their choice of answers by selecting the proper button. If the answer selected is correct, they are credited with a certain number of points, depending upon the speed of their response. If an answer is incorrect, no credit is given, but a card containing the correct answer appears for study, until the button is pressed releasing the next question for their consideration.

This technique should be a warning signal to teachers who are prone to give examinations on Monday and not return the papers until Friday or later. Immediacy of results is an important factor in the learning process.

5. Synthetic Devices

Under the head of synthetic devices, a number of items were developed by the armed forces which have a direct application to civilian education. The War Department was unable to make all field equipment directly available for training purposes. It was, consequently, necessary to develop some devices which would be as near like the originals as possible so that students could use them for operational instruction.



One of these devices was the mock-up sextant, a cardboard replica of the modern sextant. This was made of heavy, black cardboard, suitable for practicing "shooting" the sun and stars. Although not accurate to the highest degree, this device in the hands of trigonometry students would do much more toward enriching the subject than any number of lectures.

A device worthy of mention and which would be of enormous interest to boy scouts is the blinker signaling device, a card printed in black and white, with the international Morse code on the reverse. This card, only 2 in. square, is so arranged that pressure on the edges causes the white rules to slide behind the grating, thus producing the flash effect.

Probably one of the most outstanding developments has been the voice recorder, a device designed to improve diction and teach proper technique in radio-voice communication. This device uses magnetic tape instead of a record. It will record material for one hour. It is particularly interesting to note that in the event the recorded material is not to be saved, it is automatically erased by setting the volume control at "zero," and the turning switch to "record." This machine would be invaluable for keeping permanent records of students' progress, and for periodic checkups in all departments of the school, particularly dramatics and music.

Many of the devices made were working models made of cardboard. One worthy of comment and of extreme value in any science course is the cardboard mock-up of a hydraulic brake as used on the modern automobile. This is definitely a purposeful instrument to enrich any science course in the modern school.

The device known as the visual aid projector, sometimes called the delineascope, is one which any school can ill afford to be without. This machine equipped with all accessories, provides for classroom projection of charts, pictures, etc. In addition, the instructor can animate the projected image of the original subject by pointing, writing, or otherwise marking on a special transparent plate with a grease pencil.

A word should be said concerning the manufacture of synthetic devices. Some of them can be made within the school by the local shop department, or by any instructor who has the ambition, initiative, and ingenuity. Any aid that can be made and used makes teaching that much more interesting and purposeful to the student. The writer has made a trigonometry function calculator and would be willing to furnish information concerning its dimensions, cost, etc.

6. Language Guides

The army language guides are pocket-size booklets, which teach the pronunciation of the language in the simplest manner possible. They give the user a working knowledge of the language. To the writer, the ability to actually speak a language and to understand it when used by a native is an accomplishment just as important as a cultural and reading knowledge. It is not to be construed that these guides should be used exclusively; they should be made to enrich the present type of program.

7. Models

Models have been long used in such fields as anatomy, physics, etc., but the discovery of plastics has given the development of models a greater impetus than all previous progress. Many new models for use in schools have been developed recently and many more will be forthcoming. Plexi-glass is one of the substances widely used. Unquestionably, models of solid geometry figures will be thoroughly developed to eliminate for all time the bugaboo of teaching the third dimension. In this type of model, which can be made in a variety of colors, the third dimension can very easily be visualized. The models could be drilled in such a way as to include perpendiculars and other lines in solid black outline. Courses in mechanical drawing and physics would benefit greatly by the introduction of these aids. In any case, where students are exposed to models which are realistic in proportion and design, and which they themselves can manipulate, there is bound to be more learning than can be created in any other way.

In conclusion, it should be repeated that the armed forces had unlimited funds for developing any device that appeared to be necessary. The students of the armed forces were tremendously stimulated to learn, since the gaining and retaining of the knowledge and special skills presented was to them and to the entire United States a matter of life and death. To produce similar conditions in elementary and secondary schools in any community is practically an impossibility. However, the training aids just discussed are fast becoming a "must" and will grow in use as the schools keep up with the fast moving events of our scientific age. Looking ahead with education and into the not distant future, the writer is confident that training aids of the nature described will be recognized, if not required, by state departments of education.

A CAREER DAY PROGRAM IN BIRMINGHAM, MICHIGAN

For the first time since the war years, a career day program has been established in the Baldwin High School, in Birmingham, Mich. Beginning in September, this program opened with a general assembly, and the students were addressed by Supt. Dwight B. Ireland on the general topic of choosing a vocation. A film entitled, "Finding Your Lifework" was shown. Following the dismissal of the assembly, 25 student groups were designated to discuss various occupations. Each group was led by an experienced authority in the field.

The objectives of the groups, as outlined in the program are: (1) to stimulate intelligent thinking on the part of students in the matter of vocational choice; (2) to present the various factors which should be considered in choosing a lifework; (3) to familiarize students with the work of various vocational fields; (4) to introduce students to outstanding personalities in various vocational areas; (5) to vitalize the curricular work of the school in terms of vocational application.

The program, which was carefully planned and executed by the high school counselors on the basis of student interest, was well received by the students.

Counseling Veterans

Counseling of veterans has been an important aspect of the guidance program in the Baldwin Senior High School. Two major problems were encountered in the work. The first concerned the boy who had completed his high school course either before he entered the service, or during his period of service through the U.S.A.F.I. Some of these boys desired training for a specific skilled trade or craft, while others wished to pursue some professional career.

The second group of veterans presented the more difficult problem. Most of the boys had completed very few high school credits and wanted to complete their high school work in a minimum of time. Many of them would never have completed a high school program had there never been a war. Others would have completed their program in time and deserved careful assistance. Due to the difficulties involved in setting up a program which would measure up to the standards prescribed by the Baldwin High School, it was decided to refer these boys to Highland Park which has facilities to organize classwork in several fields for boys who desire to enroll.

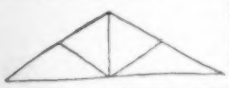
As a result of requests for special diplomas for veterans, new policies were set up for veterans who were required to pass the general educational tests.

The counselor for girls has worked toward well-defined objectives. A list of objectives has been set up, with a full program including schedule construction, interviews with parents, meetings with college authorities, information on scholarships and college entrance examinations, testing programs, employment aids, case work, talks to interested groups, conferences, field trips, and compilation of personal records.

HOW TO ENJOY RECESS

By Gregory Cooper, Architect

Pave an adequate area in the best city playground manner.



Span the distance between the uprights with light trusswork.

Send the children out to play regardless of the weather.

Crown the surface well and provide gutters and catch basins for the rain.

Muddy wet feet will be a thing of the past (we hope).

Floors will last longer.

Parents will congratulate you.

Pupils will study harder after a healthy recess.

Erect uprights as far apart as possible.

Cover the trusses with corrugated sheet magnesium or other material.

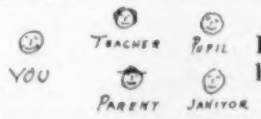
Little snow will drift under the shelter. It can be easily removed with a plow anyway.

The children will enjoy listening to the rain on the roof.

There will not be as much dirt to be swept out of the school building.

Children will catch fewer colds.

Money will be saved from upkeep costs and doctors' bills.



Everyone will be happy.

War surplus aircraft hangars would make ideal shelters.

End

THE DUTY OF EDUCATED MEN TOWARD LIBERTY AND DEMOCRACY

Civil and religious liberty in this country can be preserved only through the agency of our political institutions. But those institutions alone will not suffice. It is not the ship so much as the skillful sailing that assures the prosperous voyage. American institutions propose not only general honesty and intelligence in the people, but their constant and direct application to public affairs. Our system rests upon all the people, not upon a part of them, and the citizen who evades his share of the burden betrays his fellows. Our safety lies not in our institutions but in ourselves.

When the educated, industrious, temperate, thrifty citizens are as zealous and prompt and unfailing in duty as the ignorant and venal and mischievous, or when it is plain that they cannot be roused to their duty, then, but not until then — if ignorance and corruption always carry the day — there can be no honest question that the republic has failed. But let us not be deceived. While good men sit at home, not knowing that there is anything to be done, nor caring to know; half persuaded that a republic is the contemptible rule of the mob, and secretly longing for a splendid and vigorous despotism — then remember it it not a government mastered by ignorance, it is a government betrayed by intelligence; it is not a victory of the slums, it is a surrender of the schools; it is not that bad men are brave, but that good men are infidels and cowards. — *George William Curtis.*

PATRIOTISM AND EDUCATION

It is an evil thing for any man of education to forget that education should intensify patriotism, and that patriotism must not only be shown by striving to do good to the country from within, but by readiness to uphold its interests and honor, at any cost, when menaced from without. — *Theodore Roosevelt.*

The American
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A Monthly Periodical of School Administration
Edited by
Wm. Geo. Bruce and Wm. C. Bruce

UNESCO

OF ALL the conferences of the United Nations at Paris, the forthcoming meeting of the United Nations Educational, Scientific, and Cultural Organization gives the greatest hope of setting up a program which will contribute to the genuine advance of the democratic ideal among the backward nations, among the totalitarian states, and even among the few countries that already have a democratic ideal of life and government.

The immediate purpose of UNESCO is to develop through the respective school systems of the co-operating nations and their general education agencies a better understanding and a more sympathetic appreciation of the several peoples and their cultures and of making available to them in return full information on the total knowledge and the culture of the world. In this undertaking the delegation representing the American National Commission has an important task because it is already evident that America must assume leadership in setting up the ideals and energize the agencies of education through which international understanding is to be won and the ultimate aims of such understanding — namely peace, security, and justice — are to be had.

It has been proposed that the UNESCO set up immediately five broad fields of activity through which it might begin to function:

1. An international student exchange
2. The exchange of ideas throughout the world
3. A world-wide exchange of books and educational materials
4. An attack on the illiteracy rate in backward countries of the world
5. Aid to devastated nations of Europe and Asia.

If these five activities are the sole outcome of the UNESCO the effort will be entirely worth while. To do more in securing active participation of the school systems of the respective nations will be difficult because of the very necessary limitations of the organization in educational matters that are considered domestic in nature.

Happenings in Paris and elsewhere indicate that treaty making will be largely based on political expediency, on economic greed, and on the desire of clashing ideologies to control. There will be lacking what the Constitution of UNESCO calls a peace based on "the unanimous and sincere support of the peoples of the world." This peace the same Constitution concludes "must therefore be founded, if it is not to fail, upon the intellectual and moral solidarity of mankind." At present the strongest hope of building up this solidarity is through UNESCO.

TEACHERS' SALARIES AND THE SCHOOL YEAR

RECENT discussions of the compensation of instructors' staffs have pointed out that, while teachers must live 52 weeks in the year, their salaries are thought of on the basis of the eight or nine months during which classes are in session. The school boards and executives seem to consider the monthly checks as quite high and forget that there are three, or at the very least two, long payless months each summer.

There is much value in the viewpoint of teachers who reduce their total salary to a weekly basis and who feel that they are not well paid when their weekly income is compared with that of other workers in high class occupations. The matter cannot be dismissed as it was four or five decades ago in terms of pioneer school conditions when the teacher taught six or seven months and earned from a third to a half of his or her total income from other gainful occupations on the farm or in town. Teaching today is more than ever an all-year job. It is a lifelong profession that takes years of preparation, that requires close application each year during the full year, and that implies, for progress and advancement in salary, continuous study and periodic return to an advanced professional school. These facts deserve complete acceptance by the school boards in the development of the new salary schedules now under consideration and even more so in the reorganization of the schools and school terms.

The new higher annual salaries and the liberal conditions provided for sick leave, compensation for extraclass activities, and complete job security suggest a new approach to school board thinking on vacations, terms, in-service training. They suggest that there is less reason for whittling away a week or two from the final month of the year, for allowing excessive Christmas and Easter closing, for providing adolescent-inspired free days that could be used for significant special programs. They suggest that the one-day institutes could be transformed into really effective workshops of two or three weeks' duration. There is need for reversing the thinking on these points and for considering the possibility of such new educational values as may be found in camping or in all-year work-and-school programs. If the renewed army-navy proposals for military training are enacted into law, an all-year school program may be the means of cutting down the waste of a year of life to a minimum.

SCHOOL BUSINESS MANAGEMENT AS A PROFESSION

THE activities of the School Business Executives Association give evidence that the country over the school-business managers and their associates in school-building management, purchasing, and especially accounting are moving forward toward the professionalizing of their occupation. They have a well-conceived objective in the management of school business — the educational welfare of the child and the growth of the school as a cultural, moral, and socio-civic force. They understand the need of applying to their offices a code of ethics in which integrity, efficiency, and a selfless devotion to duty are fighting the undesirable political, business, and other group pressures. They are slowly but surely extending their national and state organizations to include a majority of the men and women in the cities and larger towns. The literature of the field is showing a steady growth in amount and technical quality. The one great lack is preliminary preparation, but even this shortcoming is becoming less important as the school boards set up preliminary requirements of college education, experience in accounting or business, or training for and experience in teaching and school supervision.

It is high time that the superintendents give greater recognition to the growing professional character of the business management of schools, and that school boards in the original employment and promotion of school-business executives insist that this occupation shall be of the career type with educational achievement as its core reason for existence.

SCHOOL BUYING IN 1946

THE war years have seen the transformation of school purchasing departments. No branch of executive service, particularly in the larger cities, has been obliged to so completely change its viewpoints, to modify its policies, and literally to turn somersaults in seeking new sources of supply, in studying and adopting substitutes, and in finding wholly different types of articles. If any school purchasing agent has been inclined to sit back and do a perfunctory job of buying, of using old specification forms, accepting the lowest bid from firms who have "always received our order," and perhaps bedeviling some newcomer for a nom-

inal infraction of school precedents — that agent has been obliged to relearn his job from the beginning.

The work of school purchasing in one sense has become one of selling the schools to unwilling manufacturers and dealers. It has required tact, persistence, and resourcefulness to find needed teaching materials and equipment, to get even partial quantities, and to obtain deliveries that did not too seriously delay class or laboratory work. Understanding, patience, and a complete willingness to serve the schools has been needed to induce department heads and teachers to restudy their class programs and projects, to test substitutes and new materials and devices, and altogether to adjust themselves to a constant series of changes.

The present condition has an element of danger which purchasing offices must recognize and combat if schools and colleges are not to witness a breakdown of the policies and precautions which have built up high standards of buying efficiency and economy in the past four decades. The war will have permanently injured education if politics, irregularities in bidding, loose estimating of needed quantities and qualities, and failure to follow through on test findings — all reminders of evil days of the past — creep into school practice. On the other hand there must be no return to the harshness and the spirit of suspicion that has made some school board offices disliked by honest, well-meaning manufacturers of school furniture and equipment. School purchasing is more than ever an important aspect of educational administration that requires the able, forward-looking, and persitent attention to educational values, and to business methods.

DISMISSING INEFFICIENT TEACHERS

IN SPITE of the fact that there is a huge shortage of teachers it is still necessary for school boards and superintendents to consider from time to time the dismissal of an incompetent member of the staff. It is as much a duty of the school administration to eliminate the incompetent as it is to find and employ well-trained people with personality and character who will develop into successful teachers. When such an unwelcome task is indicated, it is well for the superintendent and the board to consider the legal status of the teacher and to employ the procedures required by law, but also to give sympathetic consideration to the personal welfare and professional future of the individual.

It seems necessary that superintendents and principals, at the opening of each year, begin a program of helping — yes of saving

THE EVER PRESENT CAUSE OF SCHOOL BOARD WORRY!

— each teacher they suspect for any reason might fail. The unwelcome task of asking for a dismissal becomes less difficult when both the teacher and the principal know that every effort has been made to save the teacher, to help her overcome her shortcomings, to avert mistakes in discipline, and to build up favorable relations with pupils and parents. In the case of younger teachers, the principal can do much in an unobtrusive way to guide her into reading helpful literature, to provide opportunity for observing other teachers who are particularly successful. In larger schools, an older teacher who can gain the confidence of the prospective failure can provide sisterly counsel that is more frank and direct than the principal can give. If such a teacher can be made to understand that the principal and the superintendent have a personal interest in her as an individual and will back her in every way necessary, perhaps half the battle of maintaining her with the pupils and community has been won.

THE extreme housing shortage suggests the abandonment of partially or wholly unused school buildings and the remodeling of these structures as apartments. Such buildings would have ample grounds for home gardening and parking; they would have ample window area and corridors; safe stairs and exits. Even if the cost of renovation ran high, the immediate relief of the returned veterans and of other new families would make the expenditures justifiable.

THE JOB OF BEING A SCHOOL TRUSTEE[1]

"There are two contending forces constantly playing upon the schools. One demands economy, reduced expenditures, and curtailment; the other demands expansion, increased expenditures, and extended services. The board of education in any particular community stands in between these contending forces. It must account to the taxpayer for every dollar of revenue for support of the schools; it must account to parents for the adequacy of the educational opportunities provided for children; it must account to employees for standards of wages and conditions of employment; and it must account to society (the state) for a program of public education that will enable it to establish and maintain a social order in which both freedom and prosperity are the attainable right of all socially competent individuals."

Being "in the middle" so to speak as it necessarily is, a board of education in arriving at its policies and determining its budget, may not be unduly swayed by the arguments of either group. These contending groups are not always sharply divided and their respective positions are not necessarily irreconcilable, for some members of the community often identify themselves with both groups. All tax reductionists do not favor the crippling or impairment of the schools. All advocates of an adequate program of free, universal education would not favor a crippling tax burden. There is a common middle ground objective which a board of education can pursue with the approval of a majority of fair-minded voters. It is upon this ground that your Corona school trustees are attempting to base their policies.

The fact that they cannot do everything that all the members of contending groups want is perhaps the reason that occasionally board members the nation over hear criticisms but rarely if ever do they hear approval of their policies and decisions. Unremitting silence and personal satisfaction in the knowledge that they have done their best are usually their only rewards for a job well done. The task of the school trustees is not easy but by establishing definite policies on all possible matters they will have a guide to follow in future decisions.

[1]Taken from the official organ of the Corona, Calif., city schools.

THE PRINCIPAL AND "HIS" SCHOOL

R. R. Smith

Much is written concerning the work of the principal and his school. I have before me a widely read book which had much to say in its day about forms of administrative organization, about the principalship and the principal, and about the general nature of the principal's work; it had much to say about the organization of the school, about the administration of the school, about the supervision of instruction, and about school extension.

All this is good. It indicates a deep interest in the work of being a principal. But most of the recent works on the principalship seem to overlook several points, which I think would help achieve better administrative results.

First, does the school belong to the principal? It seems to me that it does not. It belongs to the parents and to the students. It belongs to the teachers. Let the thousands of principals all over the country get into a "we" attitude, and "our" attitude. Quite frankly, as a classroom teacher, I believe that no principal has much chance of building a great school so long as he thinks of the school as his school and of the teachers as his teachers. I do not belong to him. I am a worker in a co-operative group of which he is the leader.

This brings me to my second point. I have a given amount of energy, energy that has been developed through various associations and contacts up to the time that this principal is placed by the superintendent in charge of the school. This energy and that of my colleagues is all the principal will have for the accomplishment of the job that he has been placed there to do. Because we are emotional human beings, we may or may not place at the disposal of the principal all of that energy. It is the first job of the principal, I am sure, to find some means of causing us to give to him for administration all our energy.

Too many writers on the principalship take it for granted that this energy is ready for the principal to administer by virtue of the fact that he has been appointed by the superintendent of schools and has had his appointment approved by the board of education. In other words, they do not differentiate between the desks and other physical property of the school and the teachers. At this point I must be very personal. I have this energy, a great deal of it. But till that individual who is my principal causes me to release it, I am helpless. If he has the key that unlocks that store, I may be able to pour this energy, one hundred per cent of it, into the co-operative enterprise for which the superintendent is to hold him responsible; if he hasn't the key, I may be able to give to the job only fifty per cent or even less. That is why I believe that his job of leadership must come first of all, just as I believe that my job of leading those students for whom I am to be responsible must come before I can even begin to do anything else with them.

Like many other persons, Russel E. Fetter, principal of the new consolidated elementary school at Rochester, Illinois found himself without a house in which to live. Two miles outside the village was one of the one room schools made vacant by the consolidation.

First it was an idea — next a lot of scrubbing, painting, and hard work, a new home was in the making.

Now Fetter and his family are comfortably housed in a home where once the "R's" were taught. It's a pretty good idea to pass along to house-less schoolmen.

But there is more to the job than just releasing energy stored up in me ready for use. I must hold this leader responsible for generating more energy than I have before he takes charge of the school. This cannot take place at once of course. At first he will do all, as leader he may be expected to do, if he releases the maximum amount already stored up so that it is available for the job contemplated by the administration. But he must release in me more energy that I now can bring to my work. I realize that there are readers who will smile in an indulgent manner. They will grant that in theory the principal should be able to release each teacher's energy and generate more for release; but they will consider it impossible, Utopian. But I am very practical. I have been fortunate at times in working co-operatively with just such a principal-leader. It has been great to find my energy released for work; it has been still greater to find, as the months passed, dormant energy which I did not dream was mine, generated by the careful leadership of that principal-leader.

Again, I can see an indulgent smile on the faces of certain readers. They are saying: "Yes, we are willing to grant that sometimes a school is fortunate enough to get such a leader, one who can release energy and generate more for release. But can we wait till all schools are in the hands of such born leaders? I do not believe that such leaders are few. I do not believe they are born. I believe that they can be trained, just as many of them as we need.

There is the false concept of leadership supply, the concept that leadership is born in the individual, that the supply must necessarily be limited, that it is not based on definite psychological principles, that there is no means by which it can be developed. This hopeless view probably is the most potent cause for our difficulty and I refuse to accept it. I believe that the universities can offer courses in leadership for principals and that a superintendent who is himself a leader can inspire his principals to achieve true leadership.

Finally, as a classroom teacher, I insist that the principal must sharply differentiate between leadership and administration. The leadership function will release and increase my energy, my skills, my experiences, as a teacher; the expert administrative function will help me to direct my energy to achieve the special purpose of the principal, produce the maximum results in the shortest possible time and with the least demands on my energy. All this must be achieved democratically through my participation in planning, in solving problems, in reviewing results and achievements, in readjusting purposes and methods.

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ETHICS FOR SCHOOL BOARD MEMBERS

(Reprint American School Board Journal, July, 1925.)

Any school board member conducts himself in harmony with this Code of Ethics when he:

1. Abstains from soliciting any employee of the school to purchase any given commodity or service, such as real estate, insurance, or professional service.

2. Assumes no personal authority in administering the work of the schools unless he has been instructed to do so at a board meeting.

3. Avoids seeking to secure a school position for a member of his immediate family.

4. Refrains from public criticism of any particular teacher, but if circumstances warrant, brings complaints to the attention of the proper supervisory officers.

5. Refrains from seeking special privileges for his children or employees.

6. Declines to offer a contract to a teacher who is known to be under contract with another school, without first determining the willingness of the teacher's employer to grant a release.

7. Abstains from seeking to perform the duties of the superintendent of schools or any other employee — such as selecting teachers, textbooks, promotion or placement of pupils.

8. Offers to teachers only such a contract as is just and equitable in form.

9. Endeavors honestly to contract with teachers on a salary basis that will cover living expenses for twelve months and a surplus for savings.

10. Stimulates and encourages the professional growth of teachers while in service by granting them permission to attend educational meetings without loss of pay, visiting days, and by encouraging them to attend summer school, to travel, and in other ways to improve their knowledge and skill in teaching.

11. Assists in securing a clear and definite statement and understanding of the duties to be performed by the board of education on the one hand and the duties of the supervisory officers and teachers on the other.

HIGH SCHOOL BAND PROMOTES GOOD NEIGHBOR POLICY

On November 25, when the football team and band of the Bowie High School in El Paso arrive in Mexico City to continue the cycle of neighborly good will which exists between Americans of Mexican ancestry and their forebears in Mexico, President Avila Camacho will see for the first time the sixty blue and white uniforms which he presented the band of Bowie High as a personal gift on September 16, 1945. The uniforms are one hundred per cent Mexican in both material and workmanship.

Bowie High School of El Paso is the largest high school on the United States-Mexican border and the largest high school in the United States whose student body is composed entirely of Americans of Mexican ancestry. Mr. H. V. Williams, principal of Bowie High School, encourages and teaches pride of ancestry and heritage which contribute to effective citizenship. The football team will play Mexico City YMCA on November 30 and the band will play a number of concerts in Mexico City's Palace of Fine Arts.

The sixty members of the Bowie High School band will wear their uniforms proudly for they were an expression of recognition accorded the 1600 students of Bowie High School by President Camacho, emphasizing the contribution of Mexico to United States citizenship. Many of the students speak two languages, possess two cultural appreciations, and two historical backgrounds.

The Bowie High School band members will carry with them the knowledge that more than 2000 former Bowie students served in World War II and that more than fifty did not come home. Theirs is not a divided loyalty, but the loyalty of American citizens who are appreciative of the contributions to civilization by peoples of all nations.

A TRIBUTE TO A BOARD MEMBER

Former teachers and school executives are frequently disliked by professional school people when they become school board members. The death September 15 of George H. Chatfield, member of the New York City board of education, caused that body to adopt a tribute prepared by Supt. John H. Wade. This tribute is worth considering in the lesson it suggests for every board member:

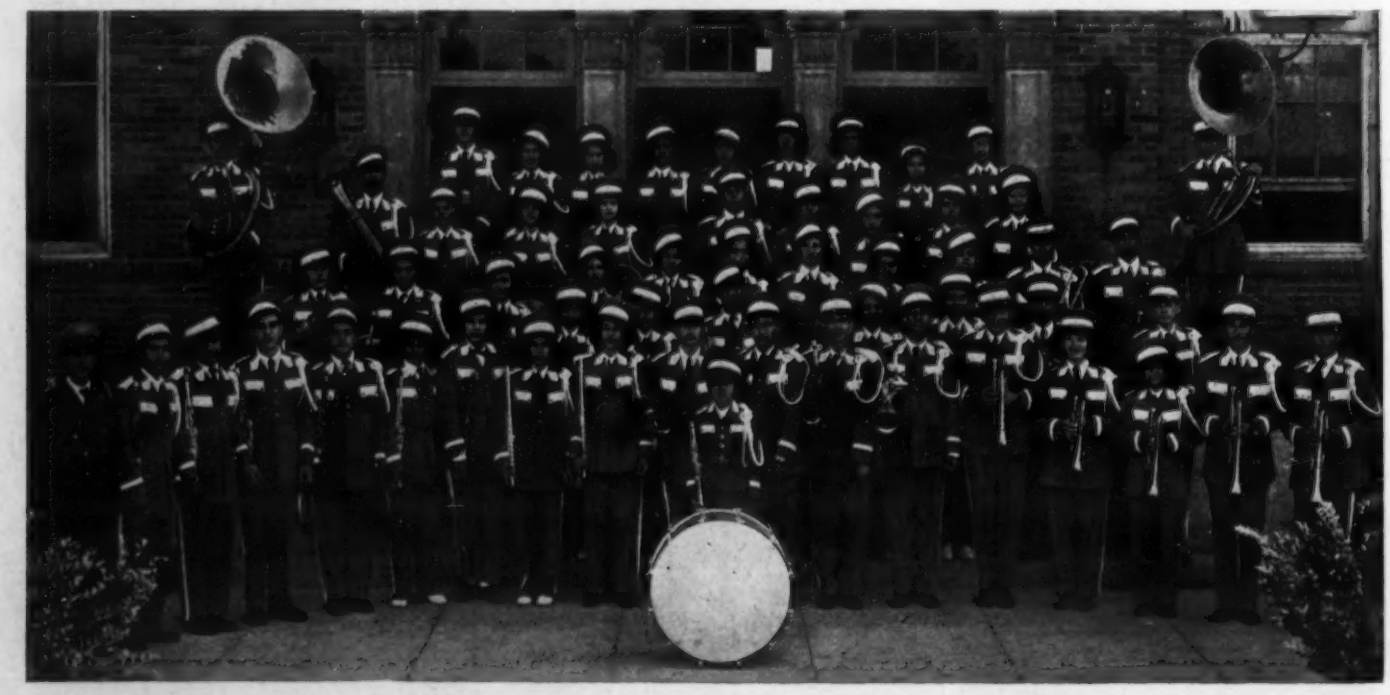
As a member of the board of education, the clearness of his thinking was matched by the forthrightness of his utterance. He had little patience with words that covered meaning, that obscured ideas instead of clarifying them. Honest and direct always in his dealings with others, he acted vigorously when convinced of the soundness of a project or an idea.

Much of his effectiveness as a board member was due to the fact that he had served in our schools as a classroom teacher and as a supervisor. This rich background of experience gave him a realistic approach to the many issues with which he had to deal officially. His resourcefulness did the rest. Respected by all, his intensely human personality made friends and held them even when he had to oppose them on the battleground of controversy.

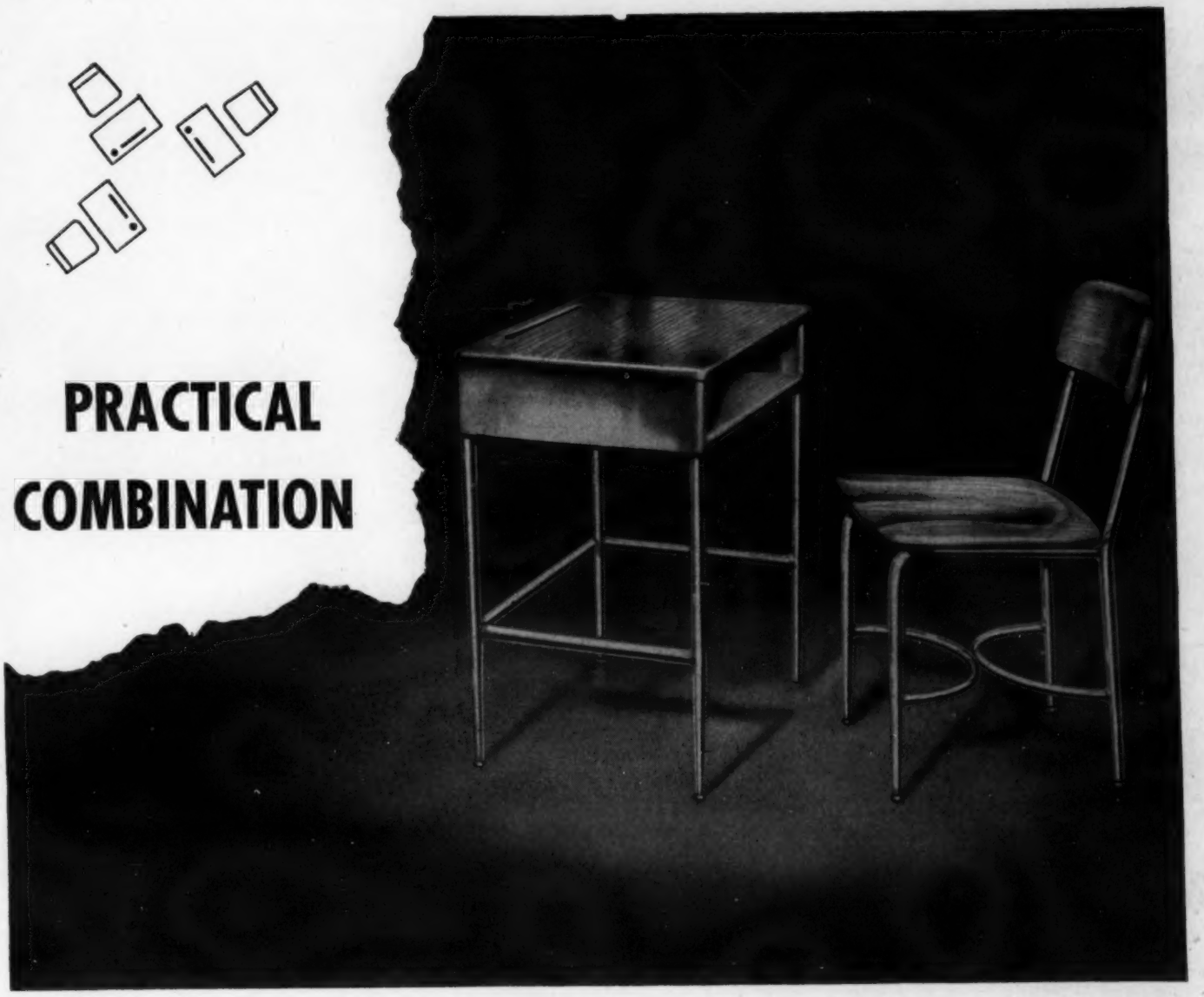
The Purpose of Education

The recent death of Dr. Bagley has brought out a number of interesting reminiscences from his students. Back in the 1920's, Dr. Frederick R. Rogers was a graduate student at Teachers College and one day buttonholed Dr. Bagley with the question: "What is the aim, the purpose, and the great objective of education?"

Dr. Bagley retorted instantly, with flashing eyes, *"Truth!"*



The Bowie High School Band, El Paso, Texas, in the uniforms presented to them by President Avila Camacho on September 16, 1945. Photo courtesy of Principal H. V. Williams, Bowie High School.



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Teachers' Salaries

MUNHALL SALARY SCHEDULE

The board of education of Munhall, Pa., has adopted a new single-salary schedule for 1947, providing minimum salaries based on the various levels of professional training and the possession of degrees. Teachers with no degrees will begin at $1,400, and those with degrees start at salaries ranging from $1,600 up to $2,100. Maximum salaries range from $2,400 to $3,800.

Under the schedule, teachers without experience and holding no degrees will begin at $1,400, and will be paid increases of $100 for six years, and then increases of $50 for the next 12 years until a maximum of $2,400 is reached in the sixteenth year.

Teachers holding a B.S. degree will start at $1,600 and will be paid increases of $100 for the first six years, and then increases of $50 for the next 12 years up to the maximum of $2,800 in the eighteenth year. Teachers with 12 credits begin at $1,600 and advance to $2,950 in the twentieth year.

Teachers having 18 credits start at $1,700 and advance to a maximum of $3,100 in the twenty-second year. Teachers with 24 credits begin at $1,750 and will advance to $3,250 in the twenty-fourth year.

Teachers with an M.A. degree start at $1,800 and will be paid increases of $100 for six years, and then increases of $50 for twenty years up to a maximum of $3,400. Teachers with 38 credits begin at $1,850 and advance to $3,500 in the twenty-seventh year. Teachers with 46 credits start at $1,900 and advance to $3,600 in the twenty-eighth year. Teachers with 54 credits begin at $1,950 and advance to $3,650 in the twenty-eighth year. Teachers with 62 credits begin at $2,000 and advance to $3,700 in the twenty-eighth year. Teachers with 70 credits start at $2,050 and advance to $3,750 in the twenty-eighth year.

Teachers holding a Ph.D. degree begin at $2,100 and will be paid increases of $100 for six years, and thereafter increases of $50 up to the maximum of $3,800 in the twenty-eighth year.

All teachers having experience outside of the Munhall system are credited at one-half value.

In applying the plan, any teacher whose salary would be more than $250 in excess of the current salary will be limited to a $250 ceiling on increments received the first and second year, and the balance will be paid in full the third year.

The board reserves the right to withhold an annual increment from any teacher upon the recommendation of the superintendent for cause, and the teacher must be given a written notice stating the reason for the withdrawal of the increment. The board also reserves the right to grant increments in excess of the maximums provided for recognition of meritorius service.

MARCUS HOOK ADOPTS SICK-LEAVE REGULATIONS

The board of education of Marcus Hook, Pa., has adopted liberal pay regulations for teachers and school employees who are absent from duty because of illness or quarantine.

School employees who are absent from duty because of illness are allowed ten full days of sick leave, which is cumulative up to sixty days.

School employees whose illness may require their continued absence beyond the accumulated sick leave will be allowed up to ten days' additional leave, at half pay in any school year. Unused half pay leave days will not accumulate.

Similarly, school employees will be allowed leave from school with pay for a death in the immediate family, provided that the leave does not exceed the accumulated sick leave. All days that employees are absent with leave on account of a death in the immediate family will be deducted from the employee's accumulated sick leave.

A written explanation of absence from duty is to be filed with the supervising principal within ten days after the absence.

All substitute teachers are required to present a doctor's certificate in the case of personal illness in order to receive pay for such absence.

When personal illness or an emergency prevents a teacher or employee from reporting for duty, notice must be sent by telephone or telegraph to the supervising principal. If the absence is for consecutive days, the supervising principal must be kept informed as to the probable date of return.

NEW YORK SALARY DEVELOPMENTS

► New York, N. Y. The Joint Committee on Teachers Organizations, in a brief on the salary situation, submitted by Mrs. May Andres Healy, has requested an immediate increase of $700 a year above the present $350 bonus, or $1,050 for all teachers. Mrs. Healy declared that nothing less than the over-all rise of $1,050 a year would permit teachers of New York to meet the increased cost of living and enable the board to recruit new teachers to replenish its depleted staff.

► Governor Dewey's special committee on the New York state education program will not begin to hold public hearings until November 15, which means that hopes of teachers for immediate state action to improve their salaries appear to be dashed. It postpones a definite decision on the teachers' salary issues until after election.

The committee, appointed early in 1946, by Governor Dewey, is headed by Benjamin F. Feinberg of the state senate. The studies of the committee have advanced sufficiently so that the time has arrived for a discussion of principles and facts with interested parties. The questions which will be involved are: (1) adequacy of salaries now paid to teachers in the state; (2) use to which the additional state aid provided is being put by cities and school districts; (3) need for and desirability of mandatory minimum salary legislation; (4) basis for state and local participation in the support of common school education; (5) sources of revenue available for support of common school education.

TEACHERS' SALARIES

► Winnfield, La. The school board has voted a 20 per cent increase in salary for teachers and employees receiving $1,988 or less, and a flat raise of $330.85 for those above that amount. White teachers on regular duty this year will receive $172,478 in salaries.

► Fulton, Mo. All full-time school employees, including teachers, maintenance men, and others, have been voted increases of $100 per year, to offset the increased cost of living.

► Rayne, La. The Acadia Parish school board has approved a new salary schedule for 1947, which sets new minimum and maximum salaries. Teachers with a B.A. degree but having no experience will receive a minimum of $1,620 and a maximum of $2,100. Teachers with an M.A. degree will begin at $1,740 and go to a maximum of $2,280. Teachers with two and three years' training will start at $1,200 a year and go to $1,620. For those having less than two years' training a maximum of $1,200 has been set.

For Negro teachers with a B.A. degree the range will be from $90 for those with experience to $120. For elementary teachers the scale is $70 to $85; and for first-, second-, and third-grade certificates, $65 to $80. Below two years' training the maximum is $60.

► Berlin, Wis. The school board has voted a $300 bonus to married men teachers, and $200 to single teachers, to offset the high cost of living.

► Lake Charles, La. The Calcasieu parish school board has apportioned 98.4 per cent of its increased funds from the state for teach-

(Concluded on page 60)

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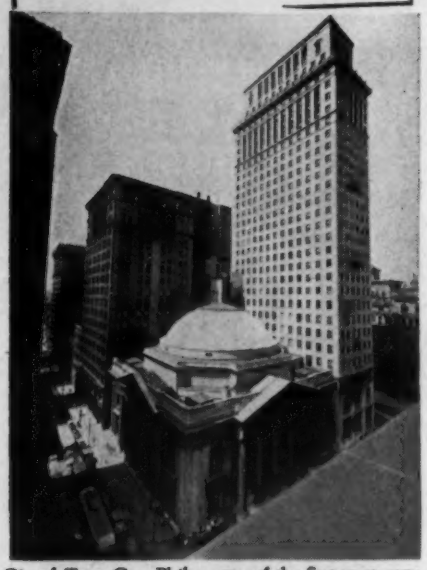

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(Concluded from page 58)

ers' salary increases. Teachers in white schools will receive increases of 20 per cent, plus the 3 per cent added for each year of service up to the maximum. Teachers in Negro schools will receive increases of 30 per cent, plus increments for each additional year of service. A total of $9,052 has been allotted for wage increases for 81 nonteaching employees.

► Rock Island, Ill. The board of education has voted a $100 blanket increase to all full-time school employees, effective with the school year 1947. The increase, which brings the teachers' total salary increase to $200 this year, is intended to meet the high cost of living.

► Oshkosh, Wis. The school board has approved a new salary schedule for 1947. Under the schedule, a four-year graduate beginning teacher will start at $1,200 per year, and in five years will advance to $1,550, and to the maximum of $1,800 after ten years. A graduate with a bachelor's degree will begin at $1,600, and will receive annual increases of $100 until the fifth year when the salary will be $2,100; after ten years the maximum salary of $2,400 will be paid. Teachers with a master's degree and no experience will begin at $1,800 per year, and will be increased to $2,600 at the end of ten years.

► Monroe, La. The Ouachita parish school board has made provisions in its 1947 budget for substantial salary increases for teachers. The white salary increase has been set at $12.50 per month, graded according to each level, and the colored increase at $14 per month at each level. The total amount to be paid all teachers during 1946-47 will reach $460,751.

► Napoleonville, La. The Assumption parish (county) school board has revised its schedule for principals, giving each principal a substantial increase in salary. Under the schedule, the minimum for a teacher with a B.A. degree is $1,420, and the maximum is $1,840, to be reached after 19 years' experience. For a master's degree, the starting salary is $1,560, and the maximum $1,980.

► All teachers, supervisors, and principals of the East St. Louis schools have been given blanket $200-a-year cost-of-living increases for 1947. The increases, which became effective in September, total $85,000 a year.

► Oshkosh, Wis. The board of education has adopted a new salary schedule, which became effective September 1. The schedule provides an additional $300 for department heads and $300 for heads of families. Under the schedule, a four-year college graduate will begin at an annual salary of $1,200, and in five years will reach $1,550, and in ten years will advance to $1,800. A similar graduate, with a bachelor's degree, will begin at $1,600, and will receive increases of $100 up to $2,100 in the fifth year, and will be paid $2,400 after the tenth year. Teachers with a master's degree and no experience will begin at $1,800 and will advance to $2,600 at the end of ten years.

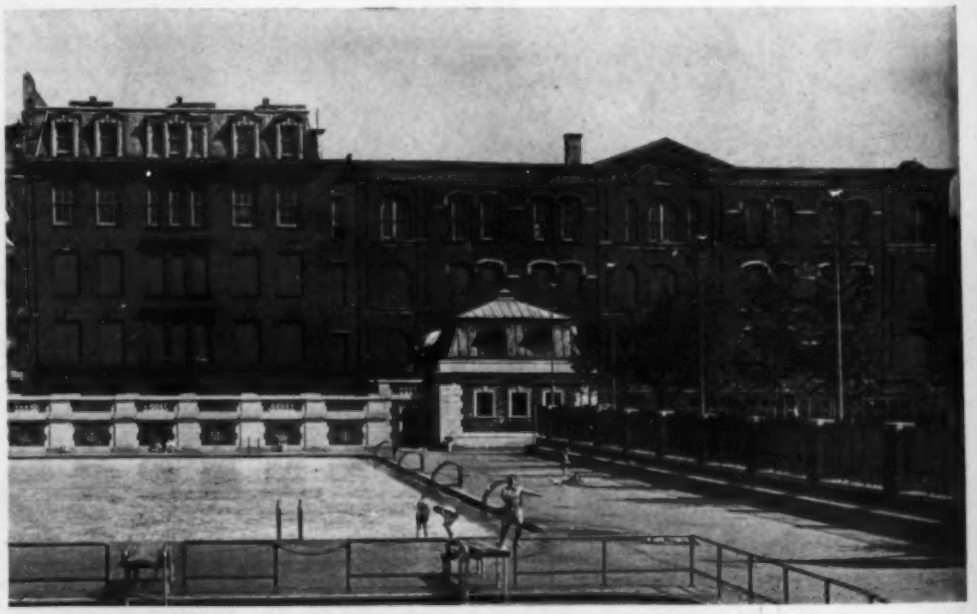
► Various teachers' associations and unions in New York City are making a demand for increases in teachers' salaries during the year 1947. They are demanding a $1,050 rise for all members of the school teaching staff. It is acknowledged that the teachers have a just claim to a substantial pay boost in view of the fact that school salaries have gone up only $350 in most cases in a 15-year period.

The New York State Council of Superintendents, in a resolution, has urged that all teachers be paid at least $2,400 per year. The state legislature will be asked to fix the minimum and to provide at least eight annual increments of $150 each.

► Temple, Tex. The board of education has voted to give a 25 per cent salary increase to members of the teaching staff. A single-salary schedule has been in operation since 1940.

► Providence, R. I. In its new budget of $4,885,000 for the school year 1947, the school board has set aside $3,090,650 for salaries of principals, directors, supervisors, teachers, helpers, and clerks in the day schools; $228,200 for salaries of administrative officers and clerks, including the departments of attendance, census, health, research and guidance, and purchasing agent; and $428,620 for salaries and wages of the janitorial department, including officers, clerks, janitors, and other employees.

► Electra, Tex. The school board has voted to give increases of $100 to members of the teaching staff. Nondegree teachers will receive $1,400 per year; degree teachers, $1,450 per year; and teachers with master's degrees, $1,498. Teachers with previous experience outside of the city schools will have $12 added to their salary for each five years' experience. All teachers will receive $48 per year additional for each year of tenure through five years. School building custodians were given increases of $15 per month, setting their wages at $115 to $125 per month.



Veterans' Housing?

A request has been made for the transformation of Public School 22 on the Lower East Side of New York City for veterans' housing. The building would provide thirty-two apartments. (New York Sun Photo)

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School Administration News

ADMINISTRATIVE COUNCIL HANDLES MATTERS OF POLICY

In Birmingham, Mich., an administrative council has been formed, composed of the building principals, the assistant superintendent, and the superintendent of schools. The superintendent regularly acts as chairman of the group and regular meetings are held each Monday afternoon of the school year. All matters of professional policy are brought before the council for discussion and an agreement reached as to the policy that should prevail. All policies regularly govern the system instead of a separate set of policies for each building or the dictation of policy from the central office. Each principal expresses himself on matters of policy and is made to feel that he has a definite part in all policy making.

The council clears all requests made by individuals or agencies outside the school for support or co-operation in civic or community affairs, and matters which may come before the administration.

The council has proved most valuable in building morale and common understanding and it permits each person in the role of administrator to share in each phase of administration. It is the belief of the school officials and teachers that it has become a valuable agency in the school system.

GREAT NECK ESTABLISHES NEW COURSES OF STUDY

The board of education of Great Neck, N. Y., has this fall introduced a tryout course of study in the social studies for the elementary schools. The course which climaxed three years' study and research on the part of the faculty members, under the direction of a general committee, is planned to provide for pupil experiences with present and past problems that man must meet and solve. The planned activities include studies of life at school, at home, and in the neighborhood and are adapted to the kindergarten, the first two grades, and grades three to six. In addition, an English course has been prepared for use in the high school, and work has been started on a revision of the arithmetic course and the art program.

This year the school system has again issued its booklet, "Getting Ready for School," for parents of children who are entering the school for the first time.

Two sets of safety regulations, one for bicycle riders, and one for pedestrians, have been prepared by the highway safety committee, and issued by the board. Pupils in the classrooms will study the safety regulations contained in the printed lists.

NEW YORK SCHOOLS TEACH A "BETTER WORLD"

Beginning with the school year 1946–47, the public schools of New York City are teaching children the meaning and possibilities of the United Nations. The work is being carried on in the elementary schools, according to an outline called "A Better World," prepared by Supt. John E. Wade and compiled from reports of teachers and assistant superintendents on programs suited to such teaching.

The course outlined is not prescriptive, but serves simply for the guidance of teachers. Its originality lies not in the concepts it presents, but in the constant conscious practice which the children get in making the principles of peace part of their own "kit of tools" for living. The course begins with the most elementary concepts for living in the primary grades; in the seventh, eighth, and ninth grades the children study the problems which the world faces in keeping the peace. Pupils leaving the ninth grade will have a working knowledge of a citizen's obligations, society's obligations to him, the interdependence of people and nations, advantages of conciliation, and the need for adaptation in a changing world.

SCHOOL ADMINISTRATION

► Supt. Bourgeois, of New Orleans, La., has estimated that retarded students are costing the schools an additional $600,000 a year, which means that extra classrooms, extra teachers, and extra textbooks must be provided. At the same time, he said, the pupil is not getting any more education, and money is wasted.

To remedy the situation, it is planned to extend the remedial program this year, by having regular teachers give extra coaching to students who are not doing well in school. These teachers are given special courses to prepare them for this sort of instruction. Dr. Cecil Mann, psychologist at Tulane University, has been employed to give lectures on child growth and development to teachers on the school staff.

► The New York State Board of Regents, in a statement on racial and religious discriminations in the schools, has given assurance that the evil does not exist in any of the public schools or higher educational institutions of the state. The board held that it had no control over private schools and colleges of the state.

► The Michigan Department of Health and the Department of Public Instruction are cooperating in administering hearing tests to pupils in Baraga County. The tests are being given to all pupils from the fourth through the twelfth grades. Children who have hearing losses will be referred to physicians and given special education.

► Lincoln, Neb. The weekly report of Supt. M. C. Lefler, for the first week of September, 1946, showed an enrollment of 12,071, a loss of 47 from the last year's figure of 12,118. The Lincoln high school showed a gain of 60, due to the ending of the war. The largest enroll-

ment in any elementary school was 773 in the Whittier School, a gain over last year.

► The Chicago school lunches, which had been raised in price during September, from 8 cents to 20 cents, suffered a reduction in patronage of approximately 70 per cent, until the prices were lowered to 15 cents.

► A total of 83,992 students, 10,000 more than in 1945–46, turned out for the opening of the District of Columbia public schools in September, 1946. The huge increase resulted from the return of veterans and the fact that the opening day of school does not coincide with a Jewish holiday this year. The elementary schools had an enrollment of 48,151 this fall; the junior high schools had 18,574; and the senior high schools, 15,291.

► The senior high school at Temple, Tex., has this year begun a re-evaluation of its program for the school year 1947. The work is being carried out by the high school faculty, with the co-operation of the State Department of Education, the Southern Association of Colleges and Secondary Schools, the Extension Division of the State University, and representatives of neighboring colleges and secondary schools. A similar program was prepared and carried out during the school year 1940–41.

► The school board of Temple, Tex., in co-operation with the state department of health, has begun a health program this year, involving a study of eye defects and remedial work in sight-saving. The program, which started in September, will extend through the entire 12 grades of the school system.

► Milwaukee, Wis. The school board has received a report from the instructions committee, calling for smaller classes and more teachers, and a reduction of the number of pupils per teacher to 30 or 35. The plan is embodied in a plan for a five-year progressive reduction of the number of pupils per class to insure more individual attention for each student.

► Wilkes-Barre, Pa. Pupils of the Wilkes-Barre township schools were out on an unscheduled vacation during October, because 43 teachers remained away from classes, beginning October 1, following a dispute with the school board over wage demands. The teachers indicated that they would not return until the board took action on their demands for a $300 annual increase, immediate payment of back wages from April, with interest, and five days' annual sick leave. The board members, in reply, stated that they were without funds to meet the demands for increases, due to financial difficulties caused by a decrease in tax revenue from hard coal mines. Since April, the teachers were paid in assignment certificates, which they used as collateral to borrow from local banks. The board repaid the principal amount of the loans, but not the interest, and the teachers sought to have this returned.

► Danvers, Mass. The tuberculin patch test was given to students of the high school during the fall term. The test is available to pupils whose parents sign permission slips. Pupils who are revealed as reactors are given X-ray tests for further protection. The cost of films for the work is borne by the county from the sale of health seals.

► Hannibal, Mo. An evening trade class for plumbing apprentices has been established in the high school by the board of education. The class, patterned on federal apprenticeship requirements, meets two evenings each week, for a period of five years. Samuel Latta has been employed as instructor.

► The Madison Vocational and Adult Education School, Madison, Wis., is offering a special evening course for parents who are interested in how public schools are serving their children. There are four of these courses given in co-operation with the Madison Parent-Teacher Association.

The first, "Know Your Schools," interprets school policies and procedures. The second, "Radio Listening," is designed for parents and laymen who are interested in radio programs for their children and themselves. The third, "Selection for Children," is intended to help parents in the proper selection of books for their children. The fourth, "Visual Education," helps the parent to become better acquainted with the use of visual instruction in the schools and the place of the public movie in child development.

► Warrenton, Mo. A farm-training program has been established in the high school, with an enrollment of 22 students.

► Rocky River, Ohio. The board of education has set a limit on fund raising in the schools. The Community Chest campaign will be conducted in the first semester. Funds raised in the second semester will be apportioned to the Red Cross 50 per cent, the national safety green cross 10 per cent, and the same percentage to the antituberculosis league (Christmas seals), Easter seals for crippled children, the march of dimes and the veterans' poppy sale. No more than one collection will be permitted in any one semester hereafter.

► Kewanee, Ill. Four new courses, comprising general mathematics, sociology, government, and English have been added to the high school curriculum this year.

► Shaker Heights, Ohio. The board has approved the purchase of 500 bleacher seats for the high school gymnasium, and the installation of a wire fence around the football field. The board has created the position of assistant chief custodian at a salary of $260 per month, to be filled by civil service examination, open to the suburb's 10 custodians.

► Clarksville, Ga. Three new courses, comprising French, chemistry, and plane geometry are being offered in the high school this year.

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School Building News

► Milwaukee, Wis. The board of school directors has recently voted to reconsider its five-year school-building program. Supt. Lowell P. Goodrich has recalled to the attention of the board a statement in the original five-year program, recommending that a biennial check be made in order to readjust the program to changing economic and social conditions. During the past two years changes have been made in the instructional program of the city schools and there have been important developments in housing and in the rehabilitation of a slum neighborhood.

► Temple, Tex. The architects employed by the board of education have completed plans and specifications for a school-renovation program, involving extensive renovation and building plans for the school system. It is estimated that the cost of the program will reach $1,750,000. The program which is being financed with the aid of federal funds will include a high school building, a Negro elementary school, and a Negro junior-senior high school.

► Sioux City, Iowa. A seven-point, 10-year school-building program has been approved by the board of education for the postwar period. The program, as planned, is designed to meet the long-range needs of the school system, to correct existing deficiencies, and to prepare for anticipated future emergencies. The seven projects comprise a vocational building, gymnasiums at two schools, an addition to an elementary school, a new arts, music, and speech center, and improvements in athletic facilities and shower-locker rooms. The program is an outgrowth of a report presented to the board by a special committee appointed in 1945 to study the postwar school needs.

► Clay Center, Kans. The school board has let the contract for the construction of a new grade and high school.

► Covington, Ky. The school board has completed plans for a new Erlanger High School and a Negro school. The board has plans under way for a $250,000 bond issue to be approved by the voters.

► Shreveport, La. The Caddo parish school board has begun plans for an extensive school-building program, to include five junior high schools, three elementary schools, and renovation and remodeling of existing buildings. The sum of $6,250,000 has been appropriated for improvements to the school plant.

► Colorado Springs, Colo. The school board and city council are co-operating in plans looking toward the construction of a school-district financed football stadium.

► Milwaukee, Wis. The building committee of the board of school directors has asked the city council for $548,000 additional funds for building construction. The committee has reaffirmed a previous recommendation approved by the board in 1945, requesting the city to provide the schools with $520,000 annually for five years.

► New York, N. Y. The board of education, in a report recently presented to the city government, has sharply protested against the action of the Board of Estimate in eliminating gymnasiums and auditoriums from postwar school buildings. The gymnasium-auditorium issue was raised on September 19, when the city authorities eliminated funds for excavation and foundation work for these facilities in the new Public School 174, Queens Borough. They gave as their reason that building costs are mounting and that the money should be spent for classrooms only.

The board of education, in its report, included a reminder that the responsibility of determining the school needs of the children of the city rests solely with the board, and not with the budget director, who recommended the elimination. The board contends that health education is one of the cardinal objectives of education and that "the elimination of an essential phase of education is a social mistake of serious proportions."

► St. Louis, Mo. The planning committee of the board of education has approved a proposal, to be submitted to the voters next spring, for a 25-cent increase in the school tax and a school-bond issue of $35,000,000. The proposal provides that the tax increase and the bond issue be carried on the ballot as separate items. The two items are intended to provide funds for carrying out a proposed expansion of the school curriculum and modernization and enlargement of the existing school facilities to meet current and prospective needs. The projects considered most urgent are two high schools, 25 elementary schools, additions to existing structures, and modernization of facilities now in use.

► Rice Lake, Wis. The board of education has purchased a 30-acre site as the future location of a high school building. The site is conveniently located and offers all the advantages for a new school. The purchase price was $8,200.

► Lamesa, Tex. The school board is faced with the problem of crowded schools and a need for an enlargement of the school plant. The board has begun plans for the construction of a grade school building to alleviate crowded conditions due to an increase in the enrollment, which has now reached 1888 pupils.

► Carlsbad, N. Mex. The school district has sold a $695,000 school-bond issue to the state, at an interest rate of one and one-half per cent.

► Jesup, Iowa. The voters of the school district have approved a school-bond issue of $75,000 for an addition to the consolidated school.

► Graham, Tex. The school board is completing a new school stadium to seat 4000 and to cost from $12.50 to $15 per seat. Easterwood & Easterwood, Fort Worth, Tex., are the architects.

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School Board News

OVERCOMING LOCAL TENSIONS

A Statement of the Stamford, Conn., School Board

The board of education of Stamford views with concern the growing tensions between various groupings in our American life, and believes that such tensions, if permitted to grow, will result in a disunited and consequently weakened America.

The board of education believes that the public schools of our country, and of our own community in particular, hold a strategic position in the solution of this problem, and have a unique opportunity and responsibility to foster better understanding and mutual respect between these groups.

Furthermore, the board of education is mindful of the fact that a strong democracy cannot endure in America unless it tends to promote the well-being of every group which goes to make up our American life.

Therefore the board of education directs—

1. That principals and teachers be exhorted to exercise still greater sensitivity to these tensions and, while refraining from any overt act or utterance which might adversely affect the sensibilities of any group, to make every endeavor to bring about a better understanding between various groups.

2. That the school curriculum, particularly the social studies and home-room activities, be reviewed to determine what material bearing on this matter might be incorporated in a revised program, and that material and techniques developed for use in other communities be made available for consideration in this review.

3. That every care be exercised to make sure that every opportunity is afforded to all groups to participate in all extracurricular activities.

CHICAGO DEVELOPMENTS

The rejuvenated Chicago board of education, which includes six new members recommended by a citizens' committee of college presidents and deans and appointed by Mayor Kelly, has begun a study of its two major problems: (1) the necessity of increasing teachers' salaries, (2) the selection of a new superintendent. The board has voted to discontinue the secret premeeting sessions which have been the cause of continued criticism by the press and interested civic bodies. It is expected that the teacher shortage, which caused 168 elementary classrooms and 88 high school sections to be without instructors as of October 1, will be relieved gradually through the elimination of the personnel practices criticized by the N.E.A. in its report, and through wage increases and other adjustments.

ESTABLISH MEMORIAL FUND

The Minneapolis board of education has accepted a trust fund to commemorate the services of A. E. Mac Quarrie, late principal of the Washburn High School. The trust fund will run 25 years and the net annual income of about $225 will be awarded to three students on the basis of creative work in scholarship, music, the arts, athletics, or an outstanding combination of them.

BOARDS OF EDUCATION

► Jerseyville, Ill. The Jersey township high school board has voted to enlarge and improve the athletic field of the school. A tract of land has been purchased, which will be used for track and football space and a parking space.

► Effingham, Ill. The school board has approved the plans for a hot lunch program to be operated partly with state and federal funds, and partly with local school funds.

► Detroit, Mich. The school board has been involved in a controversy over Bible reading in the schools. The board voted against compulsory reading of the Lord's Prayer and the Ten Commandments in all schools in the face of protests from a group of Fundamentalists.

► Morrison, Ill. The school officials have held a conference with the city officials in an effort to formulate a safety program for children. The schools, in co-operation with the city, have decided to organize a school safety patrol to aid children crossing dangerous intersections.

► Gruver, Okla. The school board has erected a teacherage two blocks from the schools. The building contains two apartments with ample room for two teachers in each apartment.

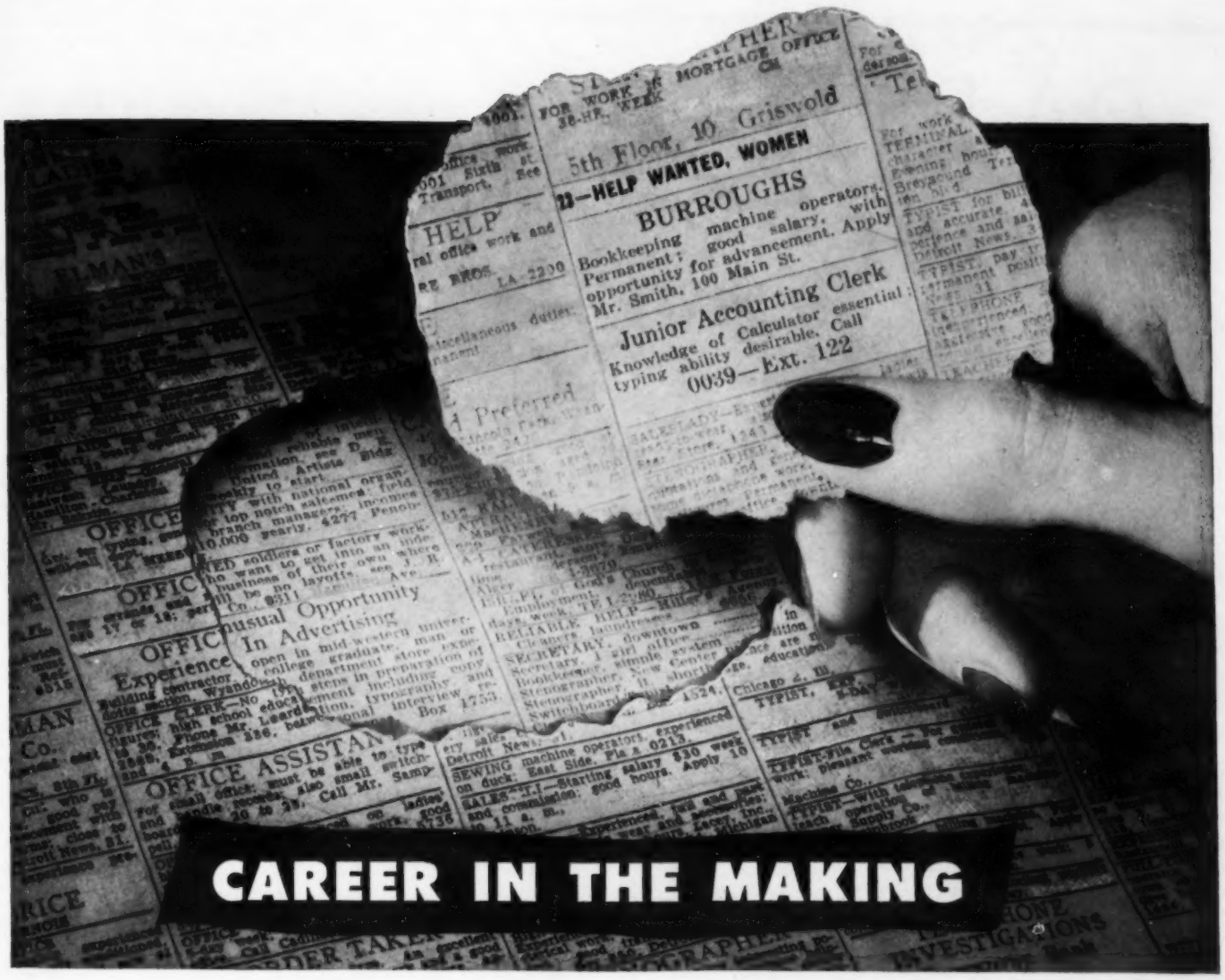
► Wichita, Kans. The school board has abolished standing committees. Any action that cannot be handled by the entire board will be handled through a special (temporary) committee appointed by the chairman. The system of standing committees had been in operation for many years.

► Houston, Tex. The school board has been compelled to raise the prices for school lunches because of the rising cost of food materials. Milk this year will cost 6 cents; ice cream, 7 cents; apples, 4 cents; oranges, 3 cents. No bread and butter sandwiches will be sold.

► Sibley, Iowa. The school board has voted to place all school texts on the rental plan, beginning with the school year 1947–48. No books will be sold, but will be rented to students for a flat fee per year. The plan does not cover workbooks or other materials used by the students.

► Colorado Springs, Colo. The school board has received a legal opinion from John C. Young, school district attorney, in which he holds that a board of education has the legal authority to draw up a set of rules governing school clubs in the high school. He has upheld the board in ruling that secret societies are in direct violation of a state law.

► Bloomington, Ill. The school board has purchased a residence and a lot adjoining it, which will be converted into offices for the superintendent and the administrative staff of the schools. The purchase price was $19,000.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School Lighting

Vol. XV, No. 1. Better Light and Better Sight, 420 Lexington Ave., New York, N. Y.

Includes several papers on schoolroom lighting and illustrated articles on recent fluorescent lighting installations.

Information Sheet — Drawing Papers

Published by the Association of School Business Officials, H. W. Cramblet, Pittsburgh, Pa.

This latest addition to the specification file of the ASBO contains detail information about three classes of drawing paper, recommendations, tests, and "data" for buying drawing paper.

Proposed Guide for Planning School Plants

Compiled by the standards committee under Dr. Ray L. Hamon. Paper, 137 pp. Published by the National Council on Schoolhouse Construction, James L. Graham, Tallahassee, Fla.

The latest tentative report of the standards committee for the year 1946 is devoted particularly to principles and objectives for planning school facilities. The report is divided into six sections, taking up especially site selection and development, characteristics of the building, instruction rooms and their equipment, general facilities, service facilities, and accessory facilities.

Financial Assistance for College Students

By Russell T. Sharpe. Paper, 113 pp. $1. American Council on Education, 744 Jackson Place, Washington, D. C.

The present study, one of a series prepared under the direction of the Council's committee on student personnel work, is intended to help the colleges set up policies and techniques in the field of financial counseling. It points out that the provision of financial aid to students is the only effective means of making higher education possible for very able and ambitious students from families with limited incomes. In addition to a "centrist" philosophy of aid, the author explains types of financial aids, principles governing awards, methods of counseling, and the organization of aid agencies. A final series of chapters describes the practical, day-to-day techniques of handling scholarships, loans, student employment, co-operatives, and the special forms of aid applicable to graduate and professional schools. The report raises some pertinent questions on the future trends of financial aid as a college and governmental policy.

Overfire Jets for Smoke Abatement

By William S. Major. Paper, 7 pp. Issued by the Bituminous Coal Research, Inc., 912 Oliver Bldg., Pittsburgh 22, Pa.

The value of overfire air in smoke abatement has been given increased recognition by the manufacturers of steam generating equipment. Various forms and types of overfire jets have been employed for many years. Earlier jets were largely designed outside of scientific lines, and with little knowledge of the proper sizes of component parts.

This helpful circular, by an experienced engineer, discusses various types of jets, and suggests the auxiliary overfire air jet, which can be operated by moderate or high-pressure blowers or high-pressure steam.

New City Patterns

By S. E. Sanders and A. J. Robuck. Quarto, cloth, 205 pp., $7.50. Reinhold Publishing Co., New York, N. Y.

This book analyzes present urban layouts and argues that entirely new patterns of residential neighborhoods, of streets and transportation, and of the integration of urban areas must be developed if life in our cities is to be happy, socially satisfying, and living altogether economical. The ends to be sought can be achieved only through the development of metropolitan planning bodies endowed with sufficient powers to make a master plan and to have this plan carried into effect. The importance of the school as an essential to satisfactory living in any neighborhood is realized by the authors and practical suggestions are given for determining the location, the number, and size of buildings in both high and low population areas.

The entire book leaves the impression that the recommended building is more idealistic than practical, more generous than economic, and realizable only in the distant future under a government which is less democratic, less considerate of the system of private ownership than is presently possible.

Optical Instruments

By Earle B. Brown. Cloth, 507 pages. Price, $10. Chemical Publishing Co., Brooklyn 31, N. Y.

This book presents the principles of geometrical optics, describes in detail the operation of the generally used optical instruments, outlines the fabrication of optical elements, and suggests definite procedures for maintaining and adjusting instruments. The extended proofs of the physical theory and mathematics, and a complete glossary, complete the book. The treatment while technical throughout the book is simple enough for the high-school teacher of science to enjoy thoroughly and to use in connection with his instructional work.

The Cost of Living and Teachers' Salaries, September, 1946

Paper, 17 pp. Bulletin No. 1, September, 1946. Published by the Research Division, National Education Association, Washington 6, D. C.

A report on a study of the cost of living, based on the official figures on living costs, as measured by the latest consumers' price index, U. S. Bureau of Labor Statistics. The report shows that there has been an upward trend in the purchasing power of teachers' average salaries, with setbacks during the war and the depression. Price control and salary increases provided slight rises in purchasing power after 1943–44, but the weakening of price controls is expected to result in new losses in 1946–47. Based on the findings it is essential that teachers' salaries be raised at least 10 per cent to offset a reduction in purchasing power due to high living costs.

What About Our Schools?

Paper, 42 pp., 50 cents. Published by the Bureau of School Service, University of Kentucky, Lexington, Ky.

This illustrated report prepared by the subcommittee on education of Henderson city and county is strong medicine on the progress of education in city and county. In a section on enrollment, it is shown that of 2776 children in the city of Henderson, 374 are not enrolled in any school; in the county, of 3229 children, 522 are not enrolled in any school; in the city and county, 16 per cent of the school-age children are not found in any school. A study of city children not enrolled shows that 55 are employed, with work permits, and 80 had failed to enroll after passing the compulsory school age of 16. A study of county children indicates that of 170 not enrolled, 7 are employed, and 163 failed to enroll after passing the age of 16. A study of the high school graduates shows that 3.8 per cent in Henderson city and county are being graduated from high school, and in the city of Henderson 5 per cent.

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Personal News

► ALBERT E. SMEDLEY, of Stilesville, Ind., has taken the superintendency at Mooresville.

► DR. CHARLES E. CHAFFEE, who has accepted the superintendency at Stratford, Conn., was formerly supervising principal at Downingtown, Pa. Previously he served at Monroeton, Herndon, and Tremont. He received his doctor of education degree from New York University in 1939.

► The public schools of San Diego, Calif., opened the near school year of 1947 with a number of administrative changes. WILLIAM J. LYONS has become secretary to the board and assistant to the superintendent; ALBERT CHURCHMAN has been appointed assistant business manager; J. GRAHAM SULLIVAN is the new director of vocational and adult education; ROBERT BURGERT is director of instructional aids; and LESTER WAHRENBROCK is coordinator of staff relations.

► SUPT. PORTER H. HOPKINS, of Somerset, Ky., has been re-elected for his twentieth year.

► G. W. BANNERMAN, formerly principal of the senior high school at Wausau, Wis., has accepted the superintendency. He succeeds the late Everett C. Hirsch.

► GEORGE H. CHATFIELD, a Queens Borough member of the New York City school board since May, 1943, died September 19, after a brief illness. Mr. Chatfield, who was 72, had been a member of the school system for more than fifty years, and had enjoyed a long and distinguished career as an educator. For years he was a leading figure in the preparation of legislation safeguarding teachers' rights. He was the author of the school attendance law.

► DR. HENRY LESTER SMITH, recently appointed Indiana consultant on world educational organizations and school-building planning, is available this year for a limited number of public addresses in Indiana and in other states.

► ROY JAMES MCGAVIN, secretary of the school board of Canton, Ill., died in a hospital of a heart ailment.

► ALBERT CLINE has been elected secretary of the school board at Walnut, Iowa, to succeed Bessie Blackmer.

► J. B. LINTHICUM, formerly principal of the Longfellow School in Albuquerque, N. Mex., has been appointed director of instruction for the Albuquerque city schools. Mr. Linthicum holds an A.B. degree from Southwestern College at Winfield, Kans., and an M.A. degree from the University of Southern California, and has taken graduate work at the University of California and Columbia University, New York City.

► W. KENNETH BURKE, formerly principal of the Roosevelt Junior High School in New Bedford, Mass., has been elected superintendent of schools, to succeed Edward T. N. Sadler.

► RALPH SEER OWINGS, of Columbia, S. C., has been elected superintendent of schools at Thomaston, Ga. He succeeds Sam F. Burke.

► GEORGE R. PELL, superintendent of schools at Brazil, Ind., was guest of honor at a reception and tea, given by the Federation of City Teachers.

► ELMORE M. PUTNEY has been elected president of the school board of St. Louis, Mo., to succeed Dr. Herbert O. Winterer. DR. C. OSCAR JOHNSON has been elected vice-president.

► CLYDE V. WINKLER has assumed the duties of the superintendency at Cicero, Ill. He succeeds C. A. Weber.

► CLARK MCDERMITH has taken over the superintendency at Passaic, N. J., where he succeeds W. B. Spalding.

► H. E. MARQUETTE, of Parker, S. Dak., has taken the superintendency at Milbank.

► The school board of Monroe, Ga., has reorganized with DR. R. C. MARTIN as president, and HOMER MIX as vice-president. Other members of the board are DENNIS FORD, secretary, L. C. RADFORD, and J. T. SIGMAN.

► GLEN B. KINSER, of Anamosa, Iowa, has accepted the superintendency at Red Wing, Minn.

► SUPT. WILLIAM S. GOUDY, of Durand, Mich., has been re-elected for his thirty-fourth consecutive term.

► DR. LAWRENCE J. JARVIS has been appointed associate commissioner of education of New York State. He will have charge of the establishment of five new institutes of applied arts and sciences authorized by the 1946 legislature.

► MAXWELL V. BAILEY has been elected business manager for the board of education of Indianapolis, Ind. He succeeds A. B. Good, who has resigned after 16 years of service. Mr. Bailey, a graduate of Butler University, has been secretary of the Indianapolis board for the past 11 years.

THE AMERICAN UNESCO COMMISSION

The first meeting of the United States National Commission for UNESCO was held in Washington, September 23–26. The commission recommended guideposts for the American delegation at the first meeting of UNESCO to be held in Paris in November.

One hundred members will serve on the United States commission, including representatives of 50 educational, scientific, cultural, and civic organizations, and 40 members selected by the Department of State with 10 representing the Federal Government, 15 representing the interests of state and local authorities, and 15 members at large. Representatives of 10 additional organizations will be selected by the commission to complete the membership.

Some of the recommendations made by the education round table of the commission for which Supt. A. J. Stoddard, Philadelphia, served as chairman were:

That a small committee of experts be employed to study the methods employed for fostering international understanding in the primary and secondary schools, chiefly by sending committee members into the field to observe at firsthand the actual processes whereby the minds of children and of men are directed toward peace.

That UNESCO should convene an international conference of leaders in the field of adult education.

That a conference be called on the teaching of international relations on the university level.

That a joint committee be created on health education with the World Health Organization and the Food and Agriculture Organization and that action be taken immediately to improve the health of the people of the world.

That consideration be given to the advantages to peace and security of establishing an international institution, or institutions of higher education for training personnel for international services, for studying the techniques and machinery for peace and security, and for other higher educational research which serves the purpose of UNESCO.

That UNESCO investigate what is being done throughout the world to send teachers, students, and other persons to study and work in countries other than their own and that means be advanced for increasing this interchange.

That UNESCO carry on all its projects for peace and security under the concept of an education which begins with the local area and community.

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Teachers and Administration

► Des Moines, Iowa. A group of 35 persons recently appeared before the school board to uphold the right of a Negro kindergarten teacher to retain her present assignment in one of the elementary schools. Miss Harriette Curley's election to a teaching position in the Perkins school had brought some protests previously, when a small group of residents appeared before the board in opposition to her appointment.

► Oklahoma City, Okla. The school board has decided to transfer sixty substitute teachers to regular teaching positions in the schools this year, because the budget does not permit the employment of teachers on scheduled salaries. The regular substitutes are not on contract and no college degree is required for their employment. They are hired on a $7 per day basis. During the year 1945–46 substitute teachers were assigned because men and women teachers with the necessary requirements were not available.

► Pittsfield, Mass. Under a new salary regulation, adopted by the school board, teachers will receive pay credit for afterschool projects in such professional fields as curriculum development, the study of health problems, etc. Points leading to higher placement in the salary schedule will be allowed, with a maximum increase of $100 per year.

► Arlington, Mass. The school board has taken action this year to rid itself of married women teachers and is returning to its prewar rule against married women. The board recently dismissed Mrs. Ellen Pollock Nilsson, principal of the Brackett School, which brought protests from the parents of the children. The board has pointed out that the married women still on the staff have substitute rank and are teaching on a day-to-day basis.

► Fond du Lac, Wis. The school board has taken a stand against contract jumping in refusing to accept the resignations of two teachers. The board has voted to adopt a definite policy concerning the acceptance of resignations in the future. Two teachers had presented resignations to the board because they had been offered higher salaries in other Wisconsin cities.

► The North Carolina Department of Public Instruction, in its official bulletin for September, 1946, points out that the 1946 teacher output from the state's colleges for white students was only 52 per cent of the 1941 output. On the other hand, the output of persons trained to teach in the Negro colleges was 107 per cent of the 1941 number. The figures were contained in a survey report by James E. Hillman, director of the division of professional service, State Department of Public Instruction.

The explanation of these percentage figures, according to Mr. Hillman, was the smaller enrollment in colleges training white teachers in 1946, while Negro enrollment remained relatively high and constant.

► Warrenton, Mo. An in-service program has been established for teachers in the city schools. The program permits teachers to do constructive work during the school year and receive credit. The work is arranged on the undergraduate and graduate levels.

School Law

► The attorney general of Louisiana has rendered an opinion that a parish (county) school board may limit the outside work of principals when such work leads to inefficiency or causes neglect of schoolwork. The opinion was given in reply to an inquiry of R. V. Kerr, superintendent of Bossier parish schools, who reported that one principal in his parish had two newspapers, a second had a night patrol and is business agent for a railroad union.

► A Missouri court has declared that, in accordance with the laws of the state, the duty of combating juvenile delinquency is clearly up to the school authorities. They are authorized in every community having a population of 10,000 or over to provide so-called truant or parental schools for children who habitually absent themselves from school.

► The school board of Lynn, Mass., has received a legal opinion, to the effect that a member of that body cannot hold the position of coach for a school system. In other words, a schoolman cannot hold two offices in the same school system.

RECOMMENDATIONS ON TESTING

The Committee on Testing for the Carnegie Foundation for the Advancement of Teaching, headed by James P. Conant, has presented a report of its study on testing, which calls for the creation of a single co-operative testing agency, to carry out the functions now being carried on by the existing nonprofit agencies. The committee believes that there is need for a single testing agency, like the American Council on Education, which can be representative for all the participants in the testing programs of schools and colleges.

NEBRASKA GETS $98,640 FOR LUNCH PLAN

The state of Nebraska has been allocated the sum of $98,640 by the U. S. Department of Agriculture to pay its share of the cost of the school lunch program in the schools during the period from July 1 to September 30. The state department has also received $40,889 for the same period to reimburse the schools that purchased equipment for use in connection with the program. More than 200 schools are participating in the lunch program.

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AASA TO MEET IN ATLANTIC CITY, N. J.

The first national convention of the American Association of School Administrators since 1942 will be held in Atlantic City, N. J., March 1–6, 1947.

The program of the convention is being arranged around the general theme of "The Role of Education in the Conservation and Development of Natural and Human Resources." The general sessions will be held in the morning and evening, and the afternoon sessions will be reserved for discussion groups. It is expected that the attendance will reach 12,000 to 15,000 persons. Dr. Henry H. Hill, president of the Association, is preparing the program.

NEW YORK SCHOOLS GAIN 7000 PUPILS

The public schools of New York City opened for the academic year 1947 with a registration of 854,779 pupils, or a gain of 6803 above the report in September, 1945–46. This is the first time in many years that the schools have shown a gain in student enrollment. The major part of the increase has been attributed to the new regulation governing the admission of children to the 1A grade, which permitted the enrollment this fall of children who will reach the age of 6 by April 30 next. The regulation has added from 17,000 to 20,000 pupils to the entering grades.

NEW SCHOOL BUS REGULATIONS

The Iowa Department of Public Instruction has announced the following new school bus regulations:

1. Buses must be painted national school bus chrome (a special yellow) with black fenders.
2. Buses must be constructed of steel of sufficient strength to suspend the full weight of the vehicle on its top.
3. Exhaust pipe shall extend beyond the chassis frame.
4. Heater shall be either hot water or hot air and shall be of sufficient size to maintain a minimum temperature of 50 degrees Fahrenheit inside at zero temperature outside.
5. Bus shall be equipped with a "stop" signal arm to be operated by driver.
6. Not more than 78 per cent of the gross vehicle weight shall be on the rear tires.
7. Bodies shall be 96 inches wide with forward-facing seats; dual wheels in rear; seating capacities of 30, 36, 42, 48, 54, or 60 passengers.[1]
8. Bus must have but one compartment, with the driver in the same compartment as the pupils.
9. Exit doors must be at right of driver and controlled by driver. Lower panels of these doors must be of safety glass.
10. There must be a safety emergency door in the rear of every bus.
11. There must be roof ventilators sufficient to protect passengers from danger of monoxide poisoning.

[1]For smaller loads, specifications for a 19-passenger bus are being worked out.

STATE OF IOWA EMBARKS ON PROGRAM FOR FINANCING NEEDY SCHOOLS

The state of Iowa has begun the distribution of $1,000,000 to local school districts which need financial assistance in providing good schools for their children. State Comptroller C. Fred Porter has the list of 2282 school districts which will share in the fund. According to Miss Jessie M. Parker, state superintendent of public instruction, it will be the first Iowa state-wide payment in history for helping to equalize educational opportunity.

Of the cities to be benefited, Council Bluffs will get the most money, $47,022; Boone is second, with $15,746; Ottumwa third, with $13,678; Newton fourth, with $13,035; Cedar Falls fifth, with $12,190; and Centerville sixth, with $11,905. There will be some payments in each of the 99 counties. Ida county will get the least, $48.

The state aid bill, passed by the 1946 legislature, provides a million dollars a year now, but a major effort will be made in the 1947 assembly to increase the amount to a point where full aid may be paid under the formula.

FINANCE AND TAXATION

► Breckenridge, Tex. The school board has adopted a budget of $148,334 for the school year 1947, which calls for a tax rate of $1.50, which is an increase of 25 cents over the last year.

► St. Louis, Mo. The school board has proposed a 25-cent increase in the school tax rate to keep the school budget in balance for the next four-year period. It has been decided to delay indefinitely a $33,000,000 school-bond issue, which had been planned earlier in the summer.

► Milwaukee, Wis. The board of school directors has approved a budget of $13,803,457 for the school year 1947, which is an increase of $2,000,000 over the year 1946. The budget will include an item of $1,371,827 for teachers' salary bonuses. In addition, the sum of $824,106 is provided for the extension fund; $1,039,250 for the repair fund; and $548,236 for construction purposes. The board is planning on $520,600 to be added to its building reserve.

► New Orleans, La. The Orleans parish school board has adopted a budget of $7,731,392 for the school year 1946–47, which is an increase of $687,514 over the year 1945–46. The budget includes provision for a 10 per cent increase in teachers' salaries.

► Omaha, Neb. Supt. Harry A. Burke has presented the preliminary 1947 budget to the school board, which shows a prospective deficit of $456,000. He declared that the deficit would be a drop in the bucket compared to what the schools will face in the future, unless a broadening of the tax base to support local government is effected.

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MOTION PICTURES MOVE INTO CITY SCHOOLS

(Concluded from page 32)

Members of the committee from elementary schools are Effie Price, Angell; Mrs. Alta Frey, Barber; Mrs. Miriam Biles, Ferris; Mrs. Latona Beeman, Ford; Mrs. Alice Martin, Liberty; Mrs. Lauretta Bowden, Thomson; and Grace Baird, Willard. Also on the committee for more efficient use of visual aids in the secondary schools are Richard Waskin, lower division; Elizabeth Hunt, middle division; Mildred Bachers, upper division; and Carl Dorsey, vocational education.

This year the committee has scheduled 13 March of Time movies which it will route through the schools. The pictures are up-to-date films on current problems. Produced for theatergoers, the spot news has been removed and educational charts, graphs, and other items have been added.

Just as movies serve to mold thought throughout the schools, Robinson said, so they can serve to create new attitudes among Highland Park's citizenry. The board of education will furnish films and operators to any local civic group at any time. The largest handicap to this service, he explained, is the difficulty in transporting the equipment. During the war, the police department performed this service but has found it necessary to discontinue this practice.

COMING CONVENTIONS

October 31–November 1. Eleventh Educational Conference of the Educational Records Bureau, in New York City. Headquarters, Roosevelt Hotel.

November 6–8. Missouri Teachers' Association, at Kansas City. Everett Keith, secretary, Columbia.

November 7–8. Association of Urban Universities, in New York City. Dr. David D. Henry, president, Wayne University, Detroit, Mich.

November 7–9. Wisconsin Education Association, at Milwaukee. O. H. Plenzke, secretary, 404 Insurance Bldg., Madison.

November 7–9. Iowa Education Association, at Des Moines. Charles F. Martin, secretary, 415 Shops Bldg., Des Moines. Exhibits.

November 8–10. New Jersey Education Association, at Atlantic City. F. L. Hipp, secretary, Trenton. Headquarters, Ambassador Hotel. A. H. Skean, Atlantic City.

November 24–27. South Dakota Associated School Boards, at Sioux Falls. David Doner, secretary, State College, Brookings.

November 27–30. Virginia Education Association, at Richmond. Henry G. Ellis, secretary, Richmond 19, Va. Exhibits.

November 29. Virginia Vocational Association, at Richmond. Miss Nettie Yowell, secretary, State Department of Education, Richmond.

November 29–30. Middle States Association of Colleges and Secondary Schools, at New York, N. Y. Karl G. Miller, secretary, University of Pennsylvania, Philadelphia. Headquarters, Hotel Pennsylvania.

November 30–December 2. National Council of Chief State School Officers, at St. Louis, Mo. Ralph B. Jones, secretary, Little Rock, Ark. Headquarters, Statler Hotel.

December 6–7. New England Association of Colleges and Secondary Schools, at Boston, Mass. George S. Miller, Tufts College, Medford 55, Mass. Headquarters, Statler Hotel.

December 26–28. Pennsylvania State Education Association, at Harrisburg. H. E. Gayman, secretary, 400 North Third St., Harrisburg. Headquarters, Penn Harris Hotel.

December 26–28. Illinois Education Association, at Springfield. Irving F. Pearson, secretary, 100 E. Edwards St., Springfield. Headquarters, Elks Club.

February 19–20. American Association of Junior Colleges, at St. Louis, Mo. Headquarters, Hotel Jefferson.

STATE SCHOOL BOARD ASSOCIATION CONVENTIONS

November, 1946. *Montana School Boards Association,* Miles City. J. L. Gleason, Sr., secretary-treasurer, Livingston.

November 7–8. *Michigan Association of School Board Members,* Lansing. Dr. A. J. Phillips, secretary-treasurer, Lansing.

November 24–27. *State Associated School Boards of South Dakota,* Sioux Falls. David B. Doner, secretary-treasurer, Brookings.

November 29–30. *School Trustees Association of Virginia,* Richmond. V. E. Jernigan, secretary-treasurer, Richmond.

December 6. *New Jersey State Federation of District Boards of Education,* Trenton. Edward W. Kilpatrick, secretary, Hackettstown.

January, 1947. *Nebraska State School Boards Association,* Lincoln. Alice A. Greenslit, secretary-treasurer, Stanton.

January 10. *Tennessee Association of Public School Board Members,* Nashville. Mrs. Delbert Mann, secretary-treasurer, Nashville.

January 22–24. *Minnesota School Board Association,* St. Paul. Otto W. Barbo, secretary-treasurer, Braham.

February 6–7. *Pennsylvania State School Directors Association,* Harrisburg. P. O. Van Ness, executive secretary-treasurer, Harrisburg.

NEWS OF SCHOOL OFFICIALS

► VERNON S. FLINDERS has been elected president of the school board at Sutherland, Iowa, to succeed C. B. Jensen, who has resigned after 16 years' service. R. T. CLAYTON is a new member of the board.

► LAWRENCE LEGGE has been elected president of the school board of Chanute, Kans.

► SUPT. HAROLD WELCH, of Dennison, Iowa, has been reelected for the next school year.

► RAYMOND N. NELSON, of Cambridge, Nebr., has taken over the superintendency at Royal.

► ALBERT H. BLANKENSHIP, of Oak Ridge, Tenn., has accepted the superintendency at Springfield, Mass. The appointment carries a three-year term and a salary of $10,000.

► H. R. SHEPARD, of Leon, Iowa, has taken over the superintendency at Rinard.

► O. F. MOORE, formerly superintendent at Goldfield, Iowa, has accepted a position at the State Teachers College, Wayne, Nebr.

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School Board Conventions

CALIFORNIA SCHOOL BOARDS MEET IN SAN DIEGO

The California School Trustees Association held their sixteenth annual convention on September 29, 30, and October 1, in San Diego. The headquarters for the meeting was the U. S. Grant Hotel, where the general sessions and sectional meetings were held. The attendance was good but the enthusiasm was marvelous. It was encouraging to see such sincere interest on the part of school board members from small as well as large schools in the development of programs to meet the needs of postwar days. There are many problems in the state which are complex and troublesome, but there appeared to be this year a more generally co-operative attitude on the part of many school people than have been sometimes noted. Problems of housing, both for classrooms and students, continue to be serious in some parts of the state, but there is evidence of improvement, and a few months should make a lot of difference in this situation.

The sessions were opened on Monday with O. E. Darnall as chairman. Following the addresses of the president and secretary, Dr. Walter R. Hepner, San Diego State College, talked on "Getting and Keeping Good Teachers." At the noon luncheon, Dr. Roy E. McCall spoke on "Everyone Should Speak." At the afternoon session there was a panel discussion on Problems of School Board Members, with five educators as speakers. In the evening there was a general session on Moral and Spiritual Values in Education, with Dr. Donald H. Tippett, Mrs. Erma Pixley, and Rev. George Busdieker as the speakers.

The Tuesday sessions opened with David Jones as chairman. Dr. Frank Lindsay talked on "A New Department of Research"; Lloyd Bernard discussed "The School Board Member's Part in Stimulation of Teaching"; and Henry Berg talked on "The Value of the County Trustee." The afternoon session was given over to sectional meetings. The evening meeting constituted the annual dinner meeting, with the theme "Needed Educational Developments in California," and the speakers were Dr. Wallace Moore, Occidental College, and Bruce Findley, assistant superintendent, Los Angeles city schools.

The Wednesday morning session was devoted to a joint meeting of the school trustees and the public school superintendents, with Dr. O. E. Darnall and Dr. C. C. Trillingham as chairmen. Dr. John A. Sexson, Pasadena, talked on "Public Education's Contribution to the Postwar World." Rev. James W. Fifield, Los Angeles, was the speaker at the noon luncheon, speaking on "A Plain Talk About Home Life." The afternoon session was devoted to the topic, "General Legislation for 1947." The annual banquet of the superintendents in the evening which was open to the school trustees was addressed by Dr. Lee Dubridge, of the California Institute of Technology, who spoke on "Atomic Energy and Implications for Education."

NEW YORK STATE SCHOOL BOARDS MEET

The New York State Association of School Boards held its 1946 convention at the Hotel Syracuse, Syracuse, October 27–29.

At the general sessions the educational lessons of World War II were discussed by Dr. Alonzo G. Grace, commissioner of education for Connecticut; "Community Leadership in Education" was argued by Dean Melby, of New York University; and "The Unfinished Business of Education" was presented by Dr. John K. Norton.

At the annual dinner, Dr. James T. Spaulding, commissioner of education for New York State, discussed "The Wartime Training in Peacetime Schools"; and Dr. Willis Sutton, of Atlanta, Ga., spoke in his timely, inspirational manner on "The Battle for America."

COUNCIL OF COUNTY PRESIDENTS HOLD CONFERENCE

The Council of County Presidents' Conference of the Oklahoma State School Boards Association held a conference on Saturday, October 19, at the University of Oklahoma. Roy Spears, McAlester, presided. Among the speakers were Earl E. Sowers, Drumright; Joe Hurt, Edmond; E. L. Dawson, Wirt; Dr. Raymond Thomas, Stillwater; and Governor Robert S. Kerr.

NEW HAMPSHIRE SCHOOL BOARDS ORGANIZE

The New Hampshire State School Board Association, inaugurated by the state department of education, was organized September 26, 1946. From the 12 regional delegates who attended the meeting, the following were elected temporary officers: president, Franklin Hollis, Concord; first vice-president, James F. Malley, Somersworth; second vice-president, Wilbur C. Goodson, Tamworth; and executive secretary-treasurer, Paul E. Farnum from the state department. All school board members, present as well as past, will be eligible for membership.

The association will hold its first convention, which will be devoted entirely to educational legislation, on November 23, 1946, in Representatives Hall at the State House, Concord.

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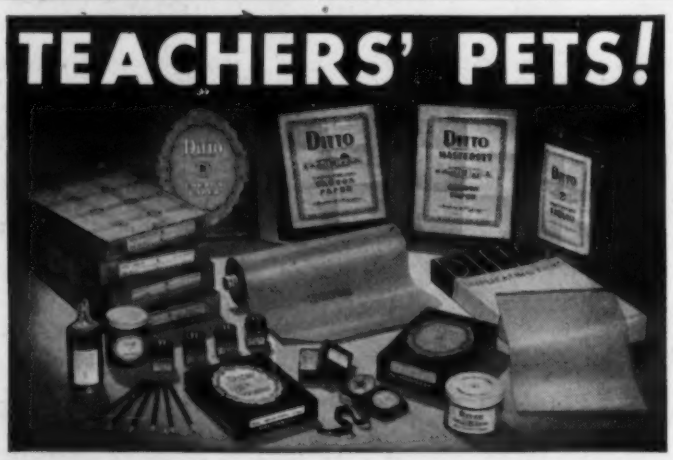

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FAMOUS LIGHTING LABORATORY REDEDICATED

The necessity for dependence upon artificial light instead of natural daylight for proper illumination in America's schools, which today is becoming more widely recognized, is the theme of the planned lighting at the model classroom exhibited in the Lighting Institute, recently reopened at Nela Park in Cleveland.

The world-famous institute, which was closed during the war, has been formally rededicated by Mrs. Thomas A. Edison, widow of the inventor, in ceremonies attended by Governor Frank J. Lausche of Ohio. Hailed as "Lighting Headquarters of the World," the institute presents the latest in lighting knowledge and developments.

Consultant Russell C. Putnam, associate professor of illuminating engineering at Case School of Applied Science in Cleveland, and designer of the school exhibit, has been assigned to show visitors the different types of modern lighting.

He opens the demonstration by showing that simulated daylight, entering through windows on the left side of the room, is not adequate alone for classroom lighting, and then proceeds to explain the various types of incandescent and fluorescent systems for comfortable and efficient schoolroom illumination.

Chalkboard Lighting

In addition to lighting, the "school center" has incorporated other new features, which, although not directly a part of the lighting system, aid materially in improving the seeing conditions of the room. For instance, there are three colors of glass chalkboards — black, white, and green — with different colors of chalk, to provide as good or better visibility as the old slate blackboard.

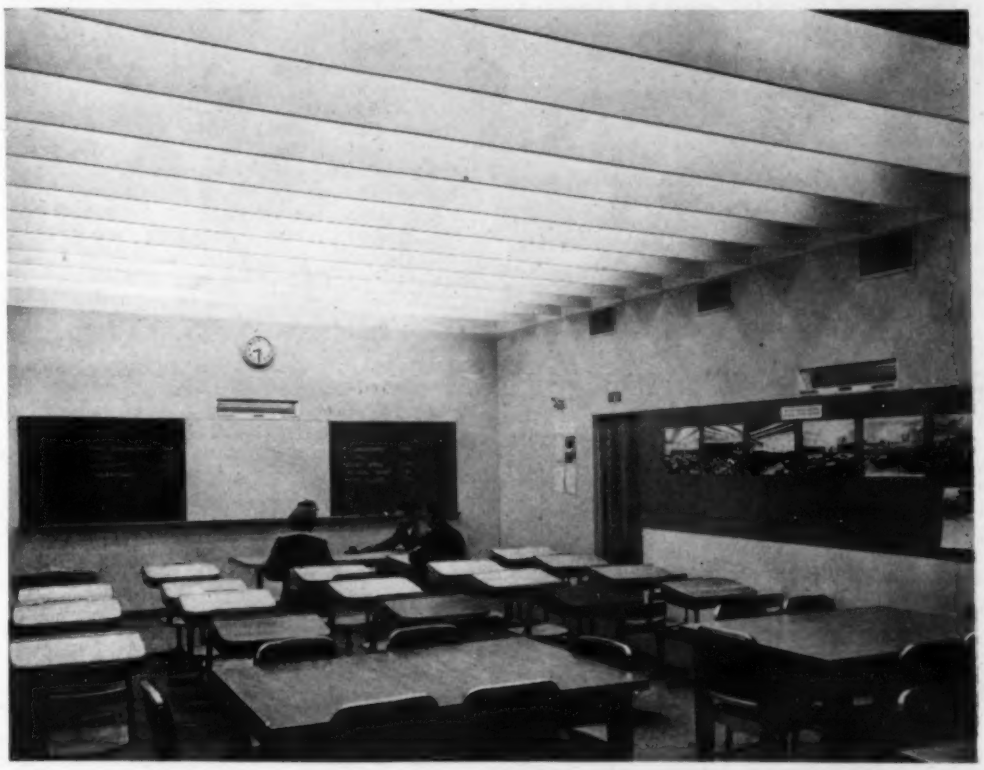
A bank of fluorescent lamps is mounted behind the white chalkboard to illuminate it with a soft light. Thus, during a lantern slide showing, for example, a teacher may write on it with dark chalk to emphasize points in any particular slide without turning on the general room illumination.

Modern type desks are exhibited in three different finishes — the dark school brown stain and two types of light natural wood finish, which the engineers assert help greatly in improving the pupils' seeing conditions. The experts say any light finish desk is better than the dark, no matter what kind of illumination is used.

Since the surrounding areas also play an important part in the function of seeing, ceilings, walls, and floors are treated with finishes of high light-reflecting coefficiency to produce better visual comfort and increased working efficiency.

Although not related to lighting, germicidal lamps, properly positioned, protect pupils against respiratory infections and aid them in an indirect way to work better and more easily. The lamps which are mounted in the walls above the eye level emit radiation of more effective wave length for the killing of air-borne bacteria.

Prof. Russell C. Putnam
Designer of the G.E. Classroom Lighting.



Model schoolroom at the General Electric Company's Lighting Institute showing 45-degree shielding for fluorescent illumination. Chalkboards on the front wall are, left to right, black, white, and green. Two germicidal lamps are shown, one above chalkboard and the other on wall at right.

Prof. Putnam explains the room's new lighting features, using, as a visual check for observers, the image of a light-measuring device projected upon the wall of the room to show the change in illumination levels resulting from variations in light pattern and position.

No Progress During War

"During the war," he recalls, "school lighting virtually came to a stop because neither equipment nor man power was available. School administrators, meanwhile, watched the development in industrial and office lighting in war plants and began realizing more than before the important part comfortable and efficient light plays in working conditions.

"Fluorescent lighting has grown to major size in the war years. It has proved its worth in supplying higher lighting levels with moderate wattage and low heat radiation. Much knowledge has been gained and school lighting techniques can now take advantage of this accumulated information."

He stresses that many things influence seeing: the size of an object; the contrast between an object and its immediate background; the time available for seeing; and the object's brightness.

"Many school seeing tasks," he says, "involve small size — fine print in dictionaries and maps, for example. Others involve poor brightness contrast — hard pencil marks on poor papers, poor mimeographing, light chalk on a dusty chalkboard. In many cases the time available for seeing is short. Also, the brightness of practically all school tasks depends on the amount of illumination on them and the reflection factor of the task. More light of the correct quality will improve the visibility of all of these tasks."

The engineer explains, however, that there is more to good lighting than just supplying enough light. Pushing a button, he lowers six globe fixtures from the ceiling, showing luminous-indirect filament lighting with no outside daylight, the type used in the average classroom today.

Difficulties of Adequate Filament Lighting

The lights put out 150 watts each. He points out that they are not adequate and adds: "Schoolmen decide to remedy this by simply putting in bigger bulbs, possibly 500 watts each. Then the brightness becomes glaring, particularly off the top of the desks. Definitely this is not the answer."

He explains that G.E.'s recommendations for good school lighting "start with either indirect or luminous-indirect." In incandescent filament lighting the trend has been, and is today, to indirect and luminous-indirect luminaires as best providing illumination with the good distribution, absence of glare, and correct brightness control, which is necessary for high quality.

He points out that since the job of maintaining lighting equipment belongs to the school custodian, he should be helped by being provided with equipment which is easy to clean and which shows when a cleaning is needed.

"This is important," he continues, "in schools because of the tendency of pupils to throw paper wads and other material into the lighting units,

New Supplies and Equipment

and also because most schools clean the luminaires only once a year, usually during the summer vacation period."

Low Heat of Fluorescent Lamps

The fluorescent lamp provides an entirely new approach to school lighting, he explains, and demonstrates it in the exhibit by flooding the room with fluorescent light from long tubes in the ceiling, shielded from the eyes by 45-degree shields, or louvers. The high efficiency and the low radiant heat emission allow higher lighting levels to be attained at reasonable consumption of electrical energy and with physical comfort. In the General Electric school center the fluorescent lighting with its shields makes it seem as though the entire classroom is being lighted from a skylight.

Prof. Putnam points out that much new lighting is going to be installed in the nation's classrooms and emphasizes that "whatever goes in will stay for years." If this lighting is uncomfortable or inadequate, it will do much harm, he warns.

"A new school lighting installation, even if it is put in only one room, has a far-reaching effect in the community," he explains. "The boys and girls go home and talk about it and their parents come to see it and discuss it. It gains widespread interest in the community.

"Suppose it is uncomfortable because of excessive brightness. Both the teachers and the pupils say, 'I don't like the new lights — they hurt my eyes.' This will be bad."

The professor concludes by pointing out that the lamps themselves are not to blame in cases like this but that the fault lies in the way they are used. A bad job of fluorescent lighting, he says, may prejudice the community. He cautions school authorities to plan their lighting carefully, considering every factor in the classroom.

"This is of paramount importance," he says. "Let's make every schoolroom in the nation a cheerfully lighted and efficient place in which to teach our future generations."

WYANDOTTE CLEANING PRODUCTS

"What, Why, Where, How?" is the title of a new 8-page leaflet listing the advantages of Wyandotte Boiler Compound and directions for its use. The leaflet answers the questions asked in its title with diagrams, charts, and written instructions.

Wyandotte's specialized line of products for maintenance cleaning . . . mopping and scrubbing floors, washing painted surfaces, and cleaning porcelain enamel . . . are covered in a separate leaflet. Advantages of using these Wyandotte Products — Detergent F-100, El-Bee Cleaner, 97 Paste and Steri-Chlor — as well as simple directions are included. Copies available on request.

Wyandotte Chemicals Corporation, Wyandotte, Mich.

For brief reference use ASBJ—1101.

SCHOOLS' LACK OF DAYLIGHT

Lack of adequate daylight in traditional-type school buildings as a contributing factor to defective vision and in creating posture problems in children is comprehensively covered in a monograph, "The Meaning and Magic of Windows," by Dr. Matthew Luckiesh, director of the Lighting Research Laboratory of General Electric Company. That eye defects increase in number and degree as children advance from grade to grade as a result of compromises between cost and construction in the nation's schools is shown in this treatise, and that the daylight available indoors near windows from which a large expanse of sky is visible is generally by far the nearest approach to adequate light in our indoor world.

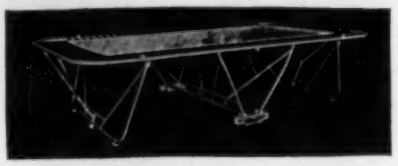
General Electric Company, Nela Park, Cleveland, Ohio.

For brief reference use ASBJ—1102.

PHYSICAL-RECREATIONAL APPARATUS

The Medart Acromat-Trampolin implements the physical education program with the much needed recreation activity, and for this reason is a welcome addition to the physical education curriculum.

The Acromat-Trampolin is designed to be used as an integral part of your physical education program as well as a separate recreational activity. It is adaptable for all age groups and is not only an activity for the potential athlete but a real and effective apparatus for corrective training as well. The fact that the Acromat-Trampolin can be readily folded and stored away makes it entirely adaptable to even the smaller gymnasium.



Medart Acromat-Trampolin

The standard "bed" is of heavy duty, double-filled white canvas clearly marked with "sight" lines to assist the performer to maintain balance. Edges are double thickness for added strength. The Medart Acromat-Trampolin, when set up ready for use, provides a spacious bed 3′ 0″ above the gym floor, within a frame 7′ 7″ wide by 13′ 10″ long. Patented frame design permits quick, easy folding of the equipment into a compact unit of 21″ wide, 7′ 7″ long, and 5′ high. The entire unit automatically lifts onto rubber-tired casters as the frame is folded.

The *Instruction Manual* contains a complete outline of Acromat-ics as a separate sports activity and explains the use of the Acromat-Trampolin in the daily Physical Education program.

Fred Medart Mfg. Co., 3535 DeKalb St., St. Louis 18, Mo.

For brief reference use ASBJ—1103.

RCA EDUCATIONAL SALES APPOINTMENT

In line with RCA Victor's recently expanded program in the field of audio-visual equipment for schools, Harry E. Erickson, specialist in this field, has been appointed assistant manager of the educational sales division. Mr. Erickson's wide experience in the audio-visual equipment field including nine years as an instructor in public schools in Kansas, Missouri, Oklahoma, and New Jersey especially qualifies him in serving the requirements of audio-visual education. Mr. Erickson received his B.S. degree from Kansas State College in Manhattan, Kansas, and an M.A. degree from Teachers College, Columbia University.

Washington News

TEXTBOOK DEARTH AFFECTS ALL SCHOOLS

The American Textbook Publishers Institute, Washington, D. C., in a statement issued on October 5, has pointed out that American college students this year face a shortage of 4,500,000 textbooks they need for school.

In the 1945–46 school year about 10,180,000 new books were shipped to schools, but the 1946–47 year is a record breaker for enrollment, and an estimated 18,000,000 new textbooks are needed. Only 13,500,000 are available.

As to grammar and high school textbooks, the Institute said that the estimated number needed for the 1946–47 school year is 90,000,000, with probably only 78,000,000 available, so that a shortage of 11,250,000 exists. Grammar and secondary schools are expected to make out better than the colleges because they placed their orders early in the season.

ALL STATES ARE PARTICIPATING IN FEDERAL LUNCH PROGRAM

All of the 48 states, the District of Columbia, and territories have signed agreements with the Federal Government for the operation of school lunch programs under the permanent school lunch law signed by President Truman last June.

At least eight million boys and girls will get school lunches under the co-operative program during the school year 1947. Under the broad policy of the law, all children will get adequate and nutritious lunches to build up their health and lead to better food habits. The funds available for the school year have already been allotted.

DISPOSAL OF SURPLUS PROPERTY

Since October 1, the War Assets Administration has assumed the sale and distribution of war surplus property to nonprofit buyers previously handled by the Federal Security Agency under SPA Regulation 14. However, the U. S. Office of Education is continuing its activities in the army-navy donation programs of surplus goods to educational institutions.

Under the new plan, Group Benefits Branch of the Public Interest Division, WAA, determines the eligibility of educational institutions entitled to the benefits of WAA regulations; issues discount and "fair value" certificates; allocates surplus property handled through national programs, and recommends the policy promoting the benefits granted to nonprofit institutions.

All "discount certificates," symbol numbers, and fair value certificates previously approved by the Federal Security Agency will continue to be honored by the WAA regional offices.

No change has been made in procedure for educational institutions, which continue to operate through the State Educational Agencies for Surplus Property.

COLLEGES GET PRIORITY ON SURPLUS MATERIAL

The Director of Reconversion of the Surplus Property Division has granted top priority on classroom and laboratory equipment in the possession of the War Assets Administration to colleges and universities. The U. S. Office of Education and the FWA have been directed to review applications for equipment which may be submitted by institutions.

The new plan will bring prompt results and furnish colleges and universities throughout the country with much of the equipment they need with a minimum of delay. In some instances, the FWA will exercise priorities to purchase with funds made available the equipment needed to outfit buildings which have been made available to institutions.

BIDS ON PUBLIC PURCHASES

Most states have laws prescribing that a municipality advertise in newspapers for bids on purchases exceeding $500 or $1,000. Advertised bids are usually sealed and are to be opened in public at a specified time and place. These laws are designed to assure wide competitive bidding and to guard against collusion in the setting of prices and the awarding of business. In themselves, they are not effective, however. Many potential suppliers — particularly out-of-town firms — will not see the advertisement. It is also possible to evade the law by dividing bulk requirements into numerous small orders of lesser amount than require advertised bids. A purchasing agent should supplement any advertisement for bids with mailed requests for bids to a special list of prospective suppliers and, of course, should make a special effort to follow the spirit as well as the letter of the law. — *Tax Foundation.*

UNITED NATIONS WEEK

As an aid in observing United Nations Week, The National Education Association has prepared a pamphlet entitled, "Aids to Teaching About United Nations." The publication is intended to stimulate a study of the United Nations in school classes, and includes 131 aids, grouped under three principal sources. More than 50 pamphlets and study guides have been prepared and are available to teachers who desire them.

CLEVELAND NEWS

► Cleveland, Ohio — "Planning Your Home," a course sponsored by the board and conducted by the Division of Adult Education, consists of ten sessions covering building restrictions and zoning, financing, planning, blueprints and specifications, materials and construction, and landscaping.

The Cleveland board and the Cleveland Press are co-operating in sponsoring a bowling institute with bowling experts as instructors. Students from several high schools participate regularly.

Student speakers from 30 Greater Cleveland high schools will assist the Cleveland Community Fund in its drive this year. Speakers will talk before school, club, and civic groups during the ten-day drive. Certificates will be awarded the orators by the American Legion 40 and 8 Society. This year school employees, teachers, and students are asked to contribute $130,000.

Apprentice classes in meat cutting are being sponsored by the school board and a committee on civilian apprentice training. The Meat Cutters Union (AFL) is active in the effort to train more meat cutters in case meat becomes available again.

Conversational English for war brides from different countries is being taught by the Adult Education Division in evening courses.

Noon movies are included in the curriculum of recent arrivals from Greece, Yugoslavia, Poland, and other European countries at John Hay High School with students ranging from 13 to 18 learning English and American customs and manners from the screen. Following the movies, the pupils study English by the conversational method.

The board has authorized Supt. Charles H. Lake to employ a full-time teacher to visit the homes of polio victims and furnish instruction which they are missing.

The board has approved a preapprenticeship course in tailoring, to be given to handicapped veterans in the West Side Trade School, under the supervision of the Veterans' Administration rehabilitation program.

The board has authorized the appointment of a teacher, to be stationed at the Western Reserve Historical Society Museum, to give lectures to visiting students and to carry on the work of the Museum among the schools. Beginning at 18 months, blind babies in Cleveland are now being taught by Cleveland's visiting Braille teacher. Even before the babies are of that age, the mothers will receive instruction if they desire it. These early visits, partly social, are calculated to show the mother that the child can learn many useful things and later earn his living if trained early enough. Creeping and walking after toys that rattle, and self-feeding are among the objectives in training the child to entertain himself and do some things for himself at an early age.

Supt. Charles H. Lake has proposed that educational authorities in long range planning for the future envisage a program which starts with the four-year-old child, and keeps the adolescent at his studies until he reaches twenty years. With the home as the basis of the plan, Mr. Lake proposes to improve the homes by preprimary publicly supported schools. Additional high school training without respect to financial status would include specific training programs based upon occupational objectives, including the professions, trade, and technical work, as well as government service and political activity.

SCHOOL-BOND SALES

During the month of September, permanent bonds were sold for school purposes, in the amount of $15,005,400. As of October 1, the average yield of municipal bonds was 1.73 per cent.

During September, short-term paper and refunding bonds were sold, in the amount of $760,000.

SCHOOL-BUILDING CONSTRUCTION

Dodge reports that during September, 1946, contracts were let in 37 states east of the Rocky Mountains, for 209 educational buildings, to cost $18,843,000.

Advertisers Products and Services

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